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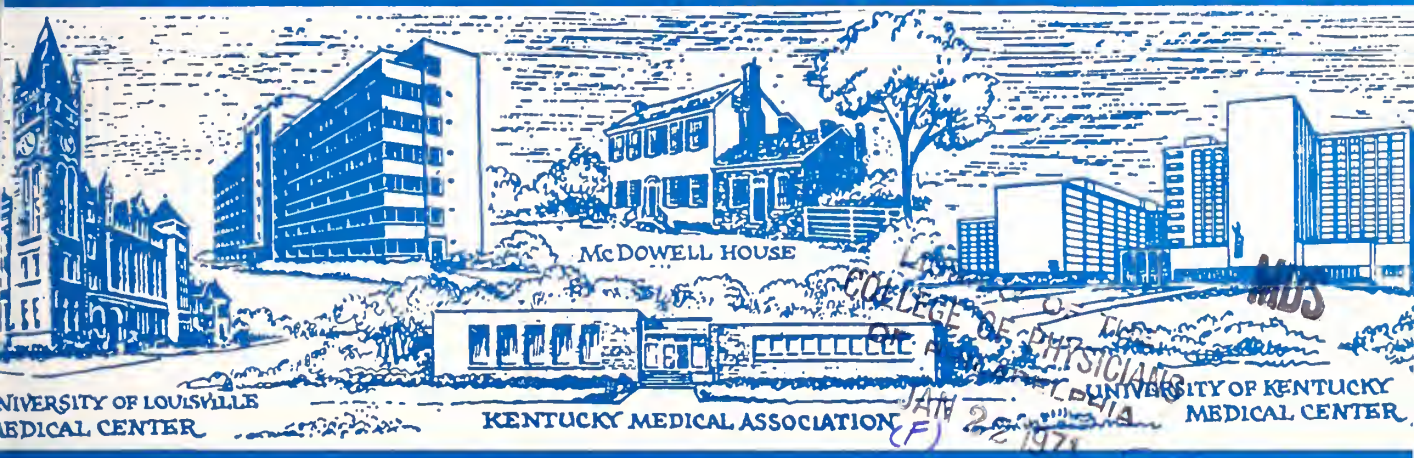
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VOLUME 69 JANUARY 1971 NUMBER 1

The Journal of The KENTUCKY Medical Association



COLLEGE OF PHYSICIANS
MDS
JAN 22 1971

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KMA 1971 INTERIM MEETING
April 15-16
Cave City

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MESSAGE FROM THE PRESIDENT



PR Needs PR

Peer Review must need a good dose of Public Relations prescribed, not only for government and the public, but the profession as well.

Physicians have always had Peer Review in one form or another; but since we have formalized it into a more sophisticated instrument, many of our own members look at it with a quizzical eye.

Communicating to all concerned is the only missing link needed for a full understanding with positive support of and response to Peer Review. For the individual physician, the profession and the public, we must have an effective peer review program within the framework of our professional society. I plead for an epidemic of understanding.

Your KMA has been a pacesetter in assuring quality medical care and proper utilization at the lowest possible cost. Our combined efforts must continue to grow. Without Peer Review there are only two other choices—Consumer Review or Government Review.

Peer Review should be synonymous with assurance of quality. Your help is needed. Be a PR-PR agent.

Marion G. Bowerman MD

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

JANUARY

23 Symposium, "Recent Advances in the Treatment of Head and Neck Cancer," Health Sciences Center, University of Louisville School of Medicine, Louisville

25 PANMED television series, "Advances in the Treatment of Malignant Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

FEBRUARY

4 Annual Southern Medical Association Lectureship, "The Management of Chronic Renal Insufficiency," Louis Welt, M.D., Hospital Auditorium, University of Kentucky, Lexington

4 Workshop on medical auditing and utilization review applications of PAS and MAP, Executive Inn, Louisville

14-20 Postgraduate course, "General Practice Review," designed to assist those who are preparing for family medicine board examinations or who wish an intensive review of clinical problems. University of Kentucky and Kentucky Chapter, AAFM; fee $125. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

22 PANMED television series, "The Current Approach to the Hypertensive Patient," KET 10:30 p.m. EST (9:30 p.m. CST)

25-27 Symposium, "Modern Methods for the Medical Work-up," University of Kentucky Medical Center, Lexington

MARCH

29 PANMED television series, "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

IN SURROUNDING STATES

JANUARY

9-20 Postgraduate course, Laryngology and Bronchoesphagology, University of Illinois, Chicago, Illinois

13-14 Postgraduate course, "Fifty Years of Surgical Progress," Cleveland Clinic Educational Foundation, Cleveland, Ohio

13-15 Postgraduate course, "Coronary Atherosclerotic Heart Disease: Prevention, Treatment and Rehabilitation," American College of Physicians, Atlanta, Georgia

18-22 Postgraduate course, "Recent Advances in Internal Medicine," American College of Physicians, Augusta, Georgia

20-21 Postgraduate course, "Orthopaedic Challenges —Reconstructive and Post Traumatic," Cleveland Clinic Educational Foundation, Cleveland, Ohio

27-28 "Complications of Aniography and Other Special Procedures and Their Legal Implications," Cleveland Clinic Educational Foundation, Cleveland, Ohio

FEBRUARY

3-4 Symposium, "General Practice," Cleveland Clinic Educational Foundation, Cleveland, Ohio

3-7 20th Annual Scientific Session of The American College of Cardiology, Washington, D.C.

10-11 Postgraduate course, "Disorders of the Red Cell," Cleveland Clinic Education Foundation, Cleveland, Ohio

24-25 Postgraduate course, "A Review of Connective Tissue Diseases by Systems: Manifestations and Management," Cleveland Clinic Educational Foundation, Cleveland, Ohio

MARCH

3-4 Postgraduate course, "Update 1971—Selected Topics in Nursing," Cleveland Clinic Education Foundation, Cleveland, Ohio

10-11 Postgraduate Course, "Advances in Urology," Cleveland Clinc Educational Foundation, Cleveland, Ohio

25-26 National Conference on Rural Health, "Community Health Programs for Tomorrow," American Medical Association, Atlanta, Georgia



THE INSURANCE PAGE



More About Medical Records

A recent patient in the writer's office gave a history which is summarized as follows: "I have angina of the heart, for which I am being treated by Dr. A. of a certain town. I have also been treated for this condition by Dr. B. of another neighborhood town where I lived for awhile. I was first treated by Dr. C. in Small City, Indiana, while I was visiting my son. Dr. C. does not keep records, and I do not believe he even asked my name. He only asked a few questions and wrote a prescription without even touching me. He told me emphatically that I have angina of the heart. I did not take the medicine, but when I returned home I consulted Dr. B. and told him that I had angina of the heart; and he gave me medicine for this condition, saying that he did not know for sure, but that I may have angina."

This little parable is a true story. Of course the patient did not relate the story in this brief form, but the information was obtained by numerous and repeated questions. This is the oldest and traditional method of peer review. It is by this method that we all judge our colleagues and form an opinion as to quality of medical practice dispensed by each of them. If I practice slip-shod medicine, I should be aware that my slip is showing, and that sooner or later it will be called to my attention by an insurance report, request for information by a colleague, appearance in court as a medical witness, or possibly as a defendant in a malpractice suit.

The doctor who has poor records cannot prove that he does practice good medicine, but the existence of well-documented medical records requires no apology and does not cause any embarrassment when presented for public scrutiny.

Now that ever-increasing numbers of patients are covered by third-party payment, it is inevitable that physicians will be required to present evidence from their records to support the diagnosis and treatment which the patient receives. It is inevitable that this concept will extend to office records in the very near future. The writer would advise all physicians who make home calls to begin making entries in their office records to cover the home calls, since these are covered by third-party agreement such as Major Medical and Usual and Customary Fees benefits.

The physician who keeps good medical records will probably never be asked to show them, but the physician who keeps poor records can expect peer review. Those who protest the loudest about invasion of their privacy and rights, appear to me to be calling attention to their Achilles heel.

LEWIS DICKINSON, M.D.

A Link in the Chain

auxiliary

"Drug abuse has reached epidemic proportions in Kentucky," Mrs. Charles Davis.

"Ten percent of our high school seniors should be pursuing a health career if the present standard of health care is to be met. Less than two per cent are going into health careers," Mrs. George Schafer.

"Only recently did I realize that Ken and I are the products of AMAERF. Without it we probably would have had to drop out of medical school," Mrs. Kenneth Hodge.



Mrs. Hornaday

These statements were made by members of the Travel Team recently organized by the Woman's Auxiliary to the Kentucky Medical Association. Members of the team are: Mrs. Kenneth Hodge, Louisville, AMAERF Chairman; Mrs. Charles P. Davis, Louisville, Children and Youth Chairman; Mrs. Thomas Ferriell, Jr., Elizabethtown, Community Service Chairman; Mrs. George Schafer, Louisville, Health Careers Co-chairman; Mrs. James Barnes, Louisville, Legislative Chairman; Mrs. Hoyt Gardner, Louisville, Workshop Co-ordinator; Mrs. David Stevens, Lexington, President-elect; and Mrs. Charles Hornaday, Owensboro, President.

The objectives of the Travel Team are: 1) To bring the very latest information on auxiliary projects, activities, and needs to every member. 2) To aid auxiliaries in setting up specific programs in areas where help is needed. 3) To glean ideas from one auxiliary and pass them on to another.

Workshops were conducted in Ashland, London, and Elizabethtown. All over the state physicians' wives are exploring community needs and becoming involved in the solution. Mary Ann Davis is working closely with Governor Nunn's staff on drug abuse. Pat Schafer is cooperating with Health Careers in Kentucky. Jean Barnes and Sally Stevens are contributing their knowledge in the areas of KEMPAC and medically oriented lay organizations.

The doctor's wife of the '70's is becoming an activist for better community health.

MRS. CHARLES E. HORNADAY, PRESIDENT
WOMAN'S AUXILIARY TO KMA

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 3-69. This thirty-nine year old married, white, pregnant female had the onset of 'flu-like symptoms January 23, 1969. There was an associated asthmatic attack. A physician was called January 26. Examination revealed her to have a high fever, shortness of breath, and a few dry rales in the chest. She was treated with Lincocin, aluminum hydroxide gel, ammonium chloride, and told to increase her fluid intake.

The family was told to report her condition to the physician the following day; however, he wasn't called until midnight, January 28, when she was very dyspneic and in distress. She was treated with an injection of adrenalin in oil and Bronkephrine. Her physician gave her another injection of adrenalin in oil about 9 a.m. the next day and recommended intravenous fluids. The family promised to bring her to the hospital if she didn't improve; they didn't feel she needed intravenous feedings at that time.

At 2 p.m. her husband called and said she was much worse, and he wanted her hospitalized.

She was admitted at 2:35 p.m. in acute distress. She was unable to lie down. She had multiple wheezes throughout her lung fields. The uterus was enlarged to approximately the size of a four-month gestation. It was obvious that the patient was acutely ill and in no condition to be transferred to a larger hospital. Oxygen was started, which she tolerated poorly. Her pulse became irregular. Her physician came to the hospital and attempted to improve her breathing with a Bennett machine; however, this was unsuccessful and the patient expired at 5:30 p.m. Her physician felt this death wasn't particularly complicated by her pregnancy, but was due to electrolyte imbalance associated with bronchial asthma and influenza.

There was no autopsy. The cause of death listed on the death certificate was respiratory failure, influenza, and six-months gestation.

Comment

The Committee classified this death as an indirect obstetrical one, with preventible factors on the part of the patient and her physician. Certainly the patient should have notified the physician, the following day, of her condition. He would have most likely hospitalized her at that point. As to the diagnosis in this situation, the most likely one would be that of a viral pneumonia. It is quite possible that there could have been underlying pulmonary or cardiac disease which contributed to her death. The Committee discussed the possibility of a pulmonary embolism occurring, or even an amniotic fluid embolus. These two conditions can give rise to the asthmatic syndrome. No previous history is given concerning asthma in this patient. Pulmonary or amniotic fluid embolism can give rise to an asthmatic condition. However, amniotic fluid embolism would be most unlikely at this stage of gestation; the patient was not in labor and membranes were apparently intact.

As to preventible factors on the part of the physician, it seemed mandatory even at the initial visit that a chest x-ray, complete blood count, a sputum smear, and culture should have been carried out. An EKG would indicate the presence of right axis strain and suggest the possibility of a pulmonary embolus. Arterial blood gas studies would certainly be essential. If she had chronic lung disease with low p 02 and a high p C02, a crisis would have been precipitated with the administration of oxygen, since the stimulus to ventilation is the presence of hypoxia. When oxygen is administered in such a situation respiratory arrest can occur. The nature of the pneumonia would have been indicated by a chest x-ray, as well as the white count, the smear, and culture of the sputum. However, it must be appreciated that certain cases of viral pneumonia are so virulent that it is impossible to save these patients.



HANDBOOK OF LEGAL MEDICINE: by Alan R. Moritz and R. Crawford Morris; published by The C. V. Masby Co., St. Louis; 3rd ed., 1970; 238 pages; price $8.75.

At a time when inflation has come to both the cost and verbiage of most medical books, it is indeed refreshing to encounter a volume that has managed to avoid these excesses. For Moritz and Morris' *Handbook of Legal Medicine* is still a handy book in size, cost, and availability of useful information.

The first of the book's two parts, labeled "Scientific Medico-legal Investigation," won't exactly make the reader an instant Perry Mason, but it will acquaint the physician with aspects of sudden or violent death that are unfamiliar to many of us. Topics covered in this section include the determination of the time of death and the identity of the dead, bullet wounds, sudden death from disease, and related subjects. The chapter on poisoning is concise, yet remarkably complete. Throughout this section, the physician's duties and responsibilities to the patient, his family, and to society, in seeing that justice is done, are stressed.

In the second part, headed "Physician and Patient —Physician and the Law," the legal principles affecting medical practice are discussed. Medical malpractice gets its share of space here, with emphasis placed on the prophylaxis of this unpleasant condition. This section has been up-dated to include discussions of artificial insemination, organ transplantation, and human experimentation.

The entire volume is remarkable for its brevity, clarity, and general good sense. It is not a research work or heavy reference source, but more a daily working manual for members of both the legal and medical professions, and it would make a superb text for medical students. This volume should be in the library, or better still on the desk, of every physician. DONALD M. THOMAS, M.D.

OTOLARYNGOLOGY: edited by William F. Robbett, M.D.; published by The C. V. Mosby Company, St. Louis, 1969; 342 pages; price $27.50.

In reviewing the otolaryngology proceedings of the Centennial Symposium, Manhattan Eye, Ear and Throat Hospital, I find that it is an excellently written book.

It is mostly written for the practicing otolaryngologist or resident in otolaryngology. Many of the newer surgical techniques are discussed thoroughly. The section on cryotherapy and microscopic laryngoscopy describes their numerous uses. In my own practice, microscopic laryngoscopy, using the Lewy type suspension device with either the Lewy laryngoscope or the Jako laryngoscope, has increased my efficiency and success rate in treatment of many lesions of the intrinsic larynx.

The book also has excellent chapters on ear surgery, head and neck cancer, with methods of reconstruction, and discussions of plastic and reconstructive surgery of the nose. In summation, the book is a condensation of discussions which have been reported before in the specialty journals of otolaryngology.

In my opinion the book is slightly overpriced for its content. I would not recommend the book for the medical student, but I would recommend it for the resident in otolaryngogoly or the private practitioner, to compliment his library with discussions on some of the newer and useful techniques in the practice of otolaryngology. BURTON J. COHEN, M.D.

CURRENT DIAGNOSIS AND TREATMENT 1970: edited by Doctors Henry Brainerd, Marcus A. Krupp, Milton J. Chatton, and Sheldon Margen; published by Lange Medical Publications, Los Altos, California, 1970; 884 pages; price $11.00.

It is stated in the preface of this book that the objective is to serve as a useful desk reference on the most widely accepted techniques currently available for diagnosis and treatment. Certainly it fails to provide adequate detail to enable a physician knowing little about a particular entity to adequately diagnose and treat it, using the information available in this book. However, it can serve the very useful purpose of listing the major facets involved in the diagnosis and treatment and, thereby, provide the physician with an opportunity to review the adequacy of his own knowledge regarding the subject.

For example, one may have been required to care for ventricular tachycardia on only rare occasions. His review of the subject in this book will probably not enable him to care adequately for the problem. However, it will at least call his attention to the fact that there are several drugs that are potentially useful in the treatment of this disorder, even though the information provided is inadequate to utilize safely the drugs mentioned. The physician may be then led to seek out additional information on the subject.

The most valuable features of the book are its excellent organization and the relevance of the material presented to clinical application. Especially valuable is the inclusion of suitable current references to clinical literature to provide greater depth of knowledge on the subject reviewed.

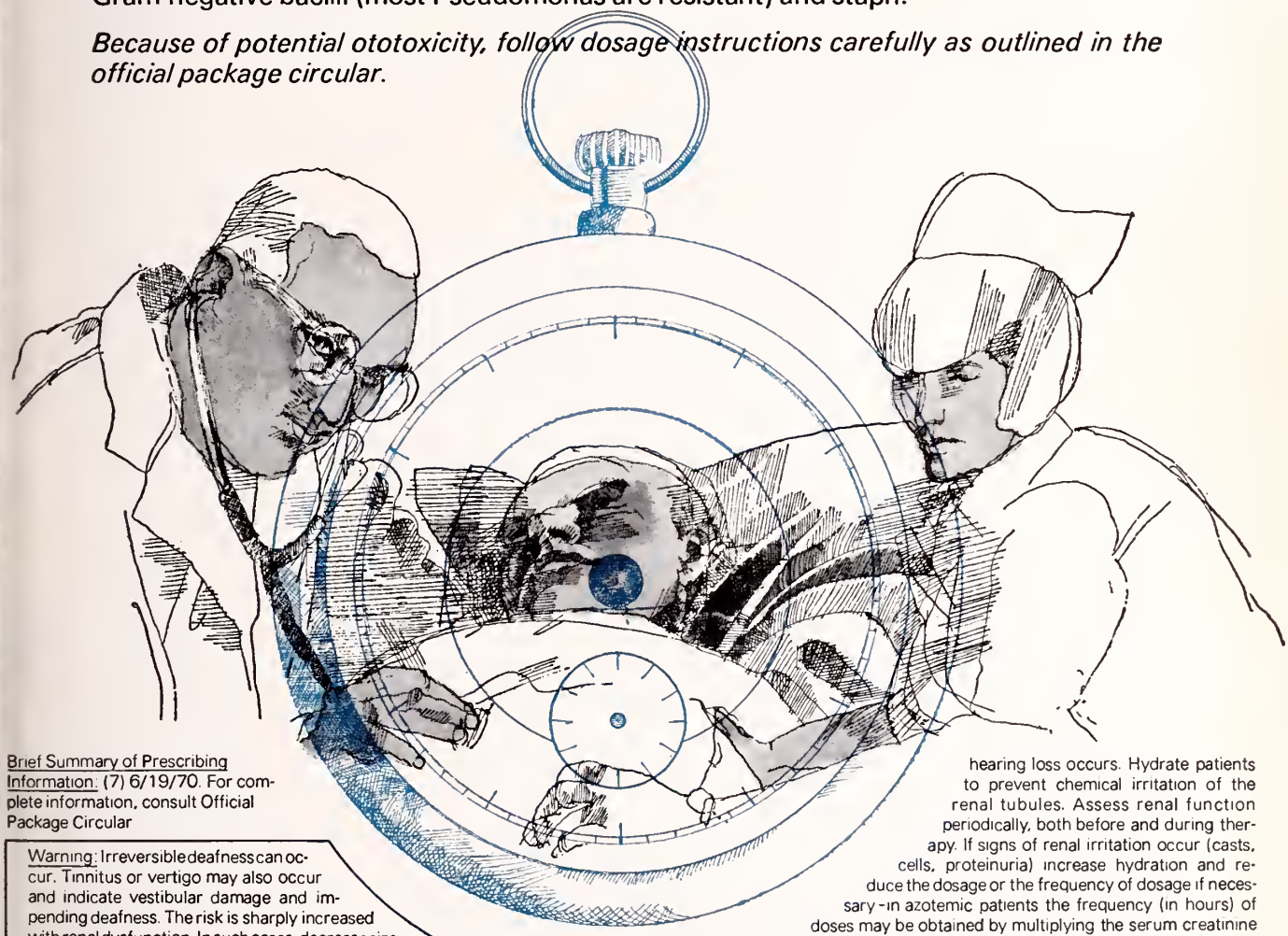
Clinical therapeutics is too complex a subject to be adequately covered in any single book. Despite this, *Current Diagnosis and Treatment 1970,* can serve as a very useful, readily available synopsis on the subject. ANGELO A. CILIBERTI, M.D.

A valuable hospital antibiotic —when there is no time

in severe systemic infections—postoperative bacteremia, Gram-negative/staph pneumonias or neonatal sepsis—Kantrex® (kanamycin sulfate) is often indicated before results of customary sensitivity tests can be reported. Clinical response is often seen within 24-48 hours in susceptible infections, with remission soon after.

10 years of experience confirm the continuing effectiveness of Kantrex® against many Gram-negative bacilli (most Pseudomonas are resistant) and staph.

Because of potential ototoxicity, follow dosage instructions carefully as outlined in the official package circular.



Brief Summary of Prescribing Information: (7) 6/19/70. For complete information, consult Official Package Circular

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established.

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *A. aerogenes, K. pneumoniae, Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.

Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective alternative therapy is available.

Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary - in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.

Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.

Dosage and Administration: The maximum total daily dose should not exceed 1.5 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours. If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.

Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available—Pediatric Injection 75 mg. in 2 ml.

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Let us do your
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Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angütis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

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The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.



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Always in good taste

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Select the form of SILAIN-GEL you want to provide symptomatic relief in: gastric ulcer • duodenal ulcer • heartburn • gastric hyperacidity • gastritis • dyspepsia

when the patient prefers the convenience of a tablet, select
Silain-Gel® Tablets:

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Also available for the patient who needs an antiflatulent agent only: **Silain®** (simethicone) Tablets

*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

Announcing the "Antgasid"

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Tablets: simethicone plus aluminum hydroxide/magnesium carbonate co-dried gel and magnesium hydroxide
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one dose does both: frees captured gas...neutralizes free acid

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The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

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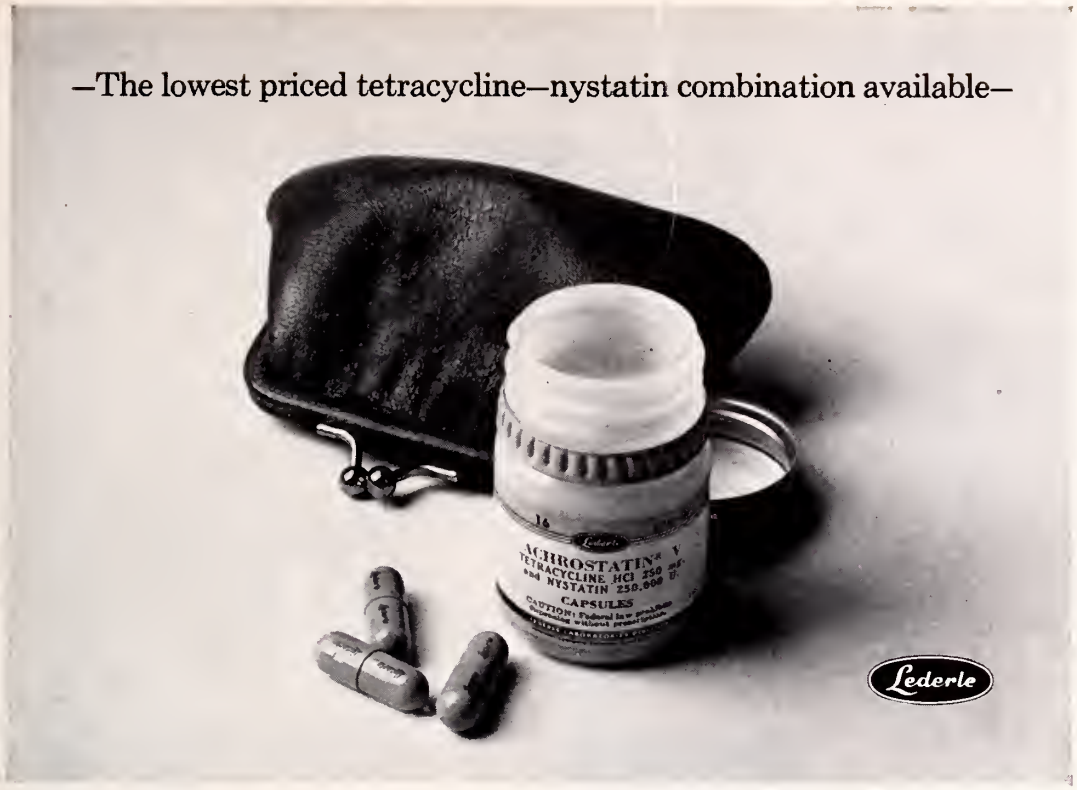
Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

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Noludar® 300

(methyprylon)

one capsule for the rest of the night



Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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A record of years of dependable broad-spectrum activity.

A record of high urine and serum antibiotic levels all with a 500mg. potency, b.i.d. convenience and low prescription cost.



Tetrex® bidCAPS®

(500 mg. tetracycline phosphate complex)

For complete information consult Official Package Circular.
(3) 4/2/70

Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms. In staphylococcal infections, indicated surgical procedures should be performed.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary during prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a minimum of 4 months.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.

Usual Adult Dose: One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

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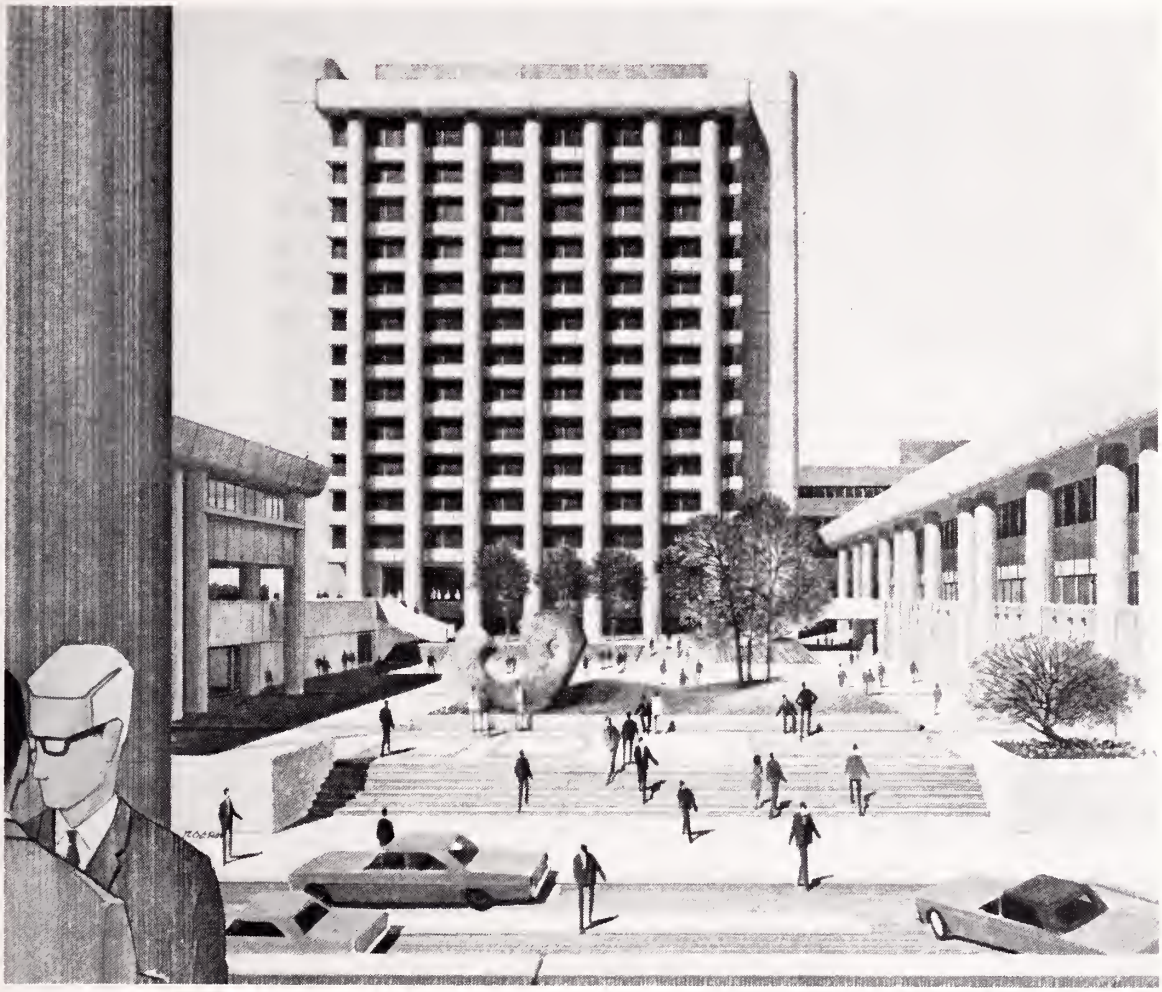
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Kentucky Medical Association

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VOLUME 69 JANUARY 1971 No. 1

Multidiscipline Laboratories: A New Concept in Medical Education at the University of Louisville School of Medicine

ROBERT S. LEVY, Ph.D.* AND DAVID H. LEE, A.I.A.**



The University of Louisville School of Medicine as seen from the concourse of the University School of Dentistry. Surrounding the landscaped plaza (from left to right) are: the Commons Building, containing the Health Sciences Library; the School of Medicine proper, containing faculty offices and research laboratories; and the Health Sciences Building. It is of interest that the windows in the Tower Building represent the hallways which, by being on the outside of the building, allow more effective utilization of space and utilities by the research laboratories inside.

*Associate Professor of Biochemistry, University of Louisville School of Medicine, Health Sciences Center, Louisville, Kentucky 40202. Doctor Levy represented the School of Medicine as Project Coordinator during the design and construction of the Multidiscipline Laboratories.

**Project Director, Smith, Hinchman and Grylls, Architects, 3107 West Grand Boulevard, Detroit, Michigan 48202

A major change in curriculum is now being followed by new laboratory facilities which will provide for a more integrated and effective teaching program in the basic sciences of medicine.

IN PLANNING its new School of Medicine, the University of Louisville has tried to take cognizance of recent advances in medical education, particularly its own major change in curriculum. The curriculum that went into effect in 1963 reduced the number of clock hours in the so-called "core" courses, thus releasing free time for an electives program and individual study. Since a medical student can now play a larger role in the design of his study plan, it is a logical outgrowth of such a system that the teaching laboratory also should cater to his individual needs. The result has been the development of the "unit" laboratory, where each student has his own study and laboratory station, and where the basic sciences of medicine can be taught together. Such a facility promotes the integration of the various disciplines and, by reducing the number of non-productive tasks, allows the student to devote more of his time to the process of learning.

Programming for Laboratory Utilization

Architects were selected after a careful study, and a faculty committee was then appointed to act as intermediates between the architects and the faculty. Representatives of all departments, both preclinical and clinical, were included on this committee. The committee's task was to describe in detail, for the benefit of the architects, the teaching requirements of the School of Medicine. After many meetings the architects were able to program a basic sciences teaching facility which fit the expressed needs of the School of Medicine.

Design of the Laboratory Building

While the design of the structure was based upon the results of the program, there were some limiting factors imposed upon the size and shape of the building. During the programming for the basic sciences teaching laboratories, programming was proceeding simultaneously on medical faculty research facilities, dental faculty teaching and research facilities, and on a health sciences library, bookstore, cafeteria, and auditorium. As a result of year-long studies and the desire of the two faculties

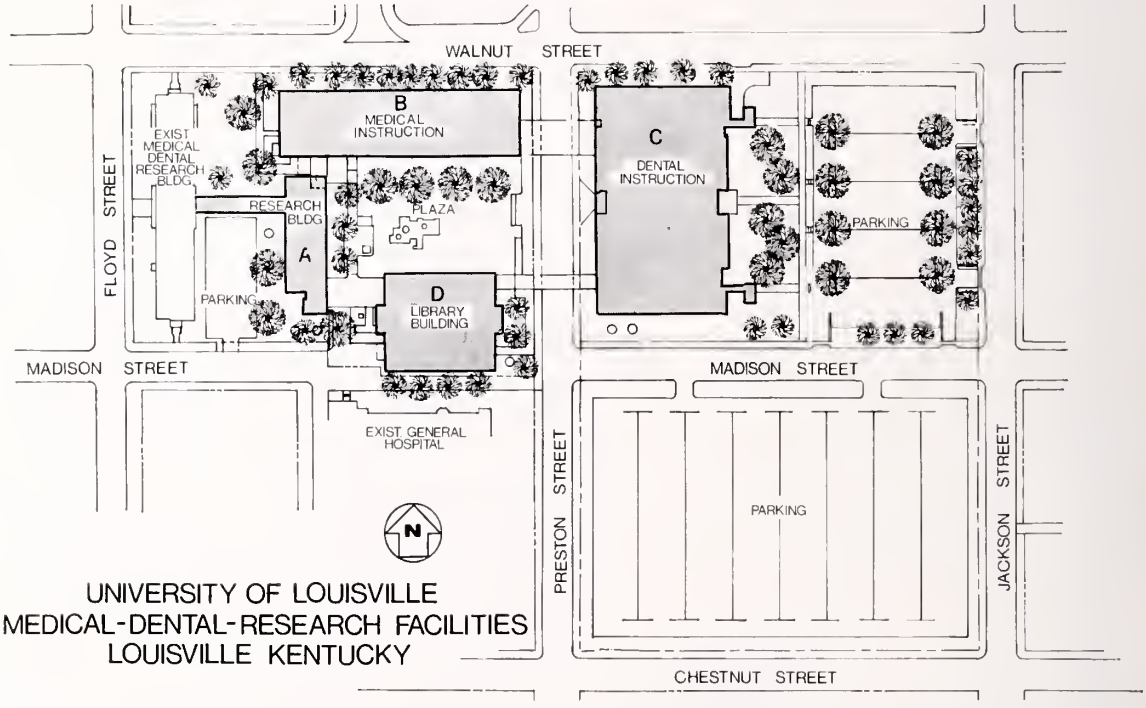


FIGURE 1 The four buildings which form the University of Louisville Medical-Dental Complex. Building A—School of Medicine (administrative and faculty offices and faculty research laboratories). Building B—the Health Sciences Building. Building C—the School of Dentistry. Building D—the Commons Building and the Health Sciences Library. Note the two over-crossings which connect the School of Dentistry to the rest of the complex.

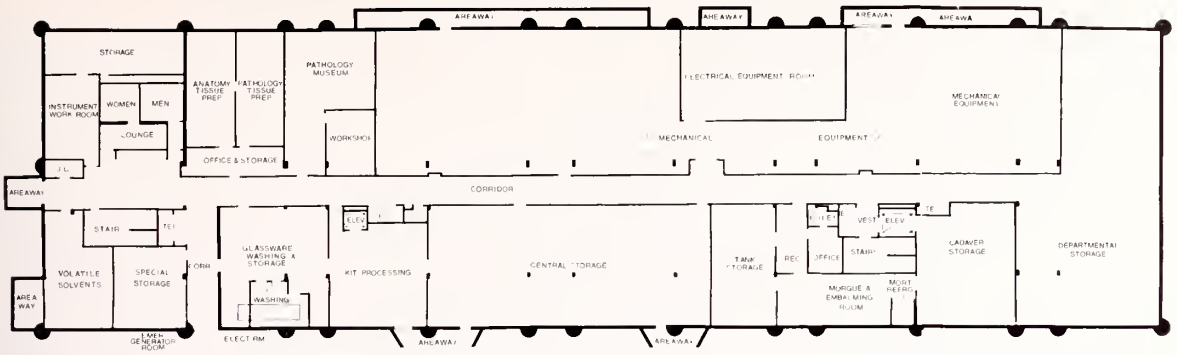


FIGURE 2 The basement of the Health Sciences Building. Note the tissue laboratories for the preparation of microscopic slides for microanatomy and pathology. Also located on this floor are the pathology museum and workshop, the glassware washing and storage center, the kit processing area, the central equipment storage room, and facilities for embalming and cadaver storage.

for identifiable buildings, it was decided that the Schools of Medicine and Dentistry should be organized into a complex of four buildings (Figure 1). The site, which represented three-quarters of a block on one block and a half of a block on another, dictated the requirement for an urban campus. The four buildings would surround a landscaped plaza and would be readily identifiable. In Figure 1, Building A represents the School of Medicine (administrative and faculty offices and faculty research laboratories). Building B represents the Health Sciences Building. Building C represents the School of Dentistry. Building D represents the Commons Building, which consists of a 500-seat auditorium, a three-story Health Sciences Library, a bookstore, and a cafeteria. All four buildings are connected by a concourse at the second-floor level. To achieve this, two over-crossings of a major street were constructed to connect with the School of Dentistry (Figure 1). The close cooperation between the faculties, the architects, and the university administration resulted in a schematic design and a grant application that received high priority from the Public Health Service.

Internal Design of the Health Sciences Building

Since site limitations were imposed, the Health Sciences Building had to be relatively long and narrow, with only three floors above ground. Consequently, the laboratories were designed with a vertical-horizontal flow for distribution of teaching equipment. The concept was developed that all hardware, glassware, and teaching equipment would be received and stored in the basement. The basement would include an instrument workroom, volatile solvents storage area, a glassware washing and storage center, a pathology museum and workshop, a microanatomy-pathology tissue preparation laboratory, and a central equipment storage center (Figure 2). Most of the processing of the teaching kits would take place here. Connecting this floor with all three floors above is a small elevator to carry carts and technical personnel. Also on this floor are the embalming and cadaver storage areas.

The first floor (Figure 3) is devoted to the

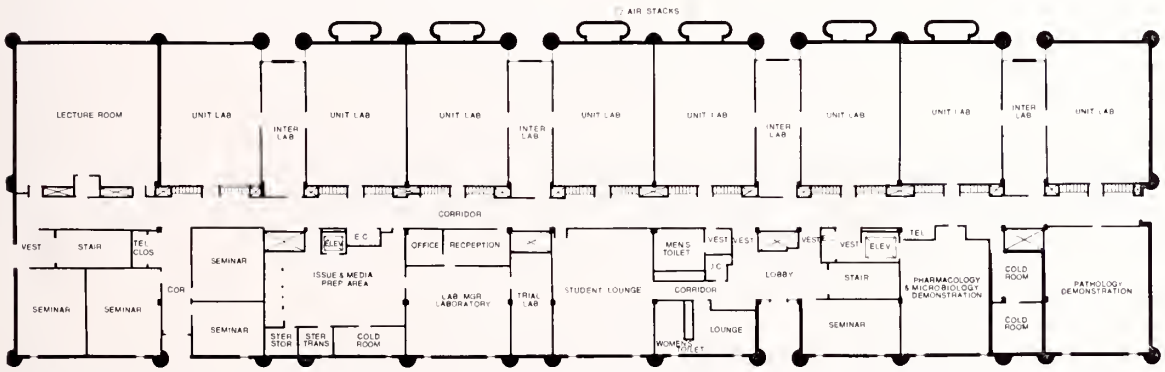


FIGURE 3 The first floor of the Health Sciences Building. This floor is for sophomore medical students who during the year take microbiology, pathology, pharmacology, physical diagnosis, and laboratory diagnosis. Special demonstration rooms are designed for use with these courses. Also on this floor is the microbiological media preparation room, the laboratory director's research laboratory, and the student lounge.

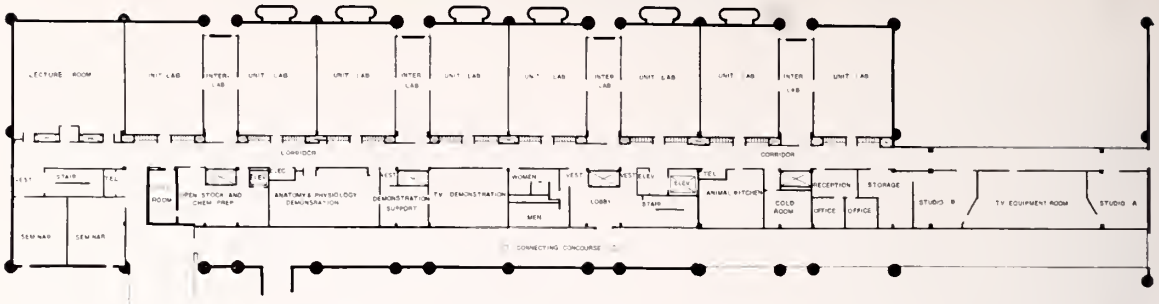


FIGURE 4 The second floor of the Health Sciences Building. This floor is for freshmen medical students who during the year take biochemistry, physiology, microanatomy, and neuroanatomy. Special demonstration rooms are designed with these courses in mind. Also on this floor are the chemical reagents preparation area and an animal room with facilities for a diet kitchen. The crossover contains the TV central which is decsribed in the text.

unit laboratories for the sophomore students. Since the school will support a class of 128 students, the unit laboratories consist of eight units accommodating sixteen students each. The second floor (Figure 4) is identical except that it houses the freshmen medical students. The third floor (Figure 5) houses the Anatomy Department's dissection laboratories, an open laboratory, and certain dental teaching facilities. The freshmen were put on the second floor to allow immediate access to anatomy dissection laboratories, since the students take anatomy in their freshman year. Lecture rooms are stacked on all three floors at one end of the building. This allows for a steeper slope to give a direct line of sight to the blackboard from each seat as well as to provide quick access for each class on their particular floor. Seminar rooms of various sizes for conferences and an electives program are scattered throughout the building.

Design of Unit Laboratories

The unit laboratories were designed to allow the maximum amount of flexibility for teaching purposes, yet to provide a feeling of close relationship with the instructor. In Figure 6 it can be seen that the laboratories are divided into four modules, each accommodating four students. Each student has a sit-down position at a low bench, with room for his books, microscope, and a small amount of equipment. Directly behind him is a stand-up position at a high bench. In the center of the high bench is a utilities pedestal which provides him with power, water, gas, air, vacuum, and specialized circuits for electricity and gas, as well as a small sink. The high bench is placed away from the wall to allow the instructor freedom of circulation around all four students. The students can work individually, as pairs, as foursomes, or as a unit of sixteen. In the center of the unit laboratory is a conference area to allow the students to face toward the instructor's station. The instructor's station includes a blackboard, a desk, utility table, and intercommunication with the television central control room. The students' stools are adjustable to allow them to work at a sit-down po-

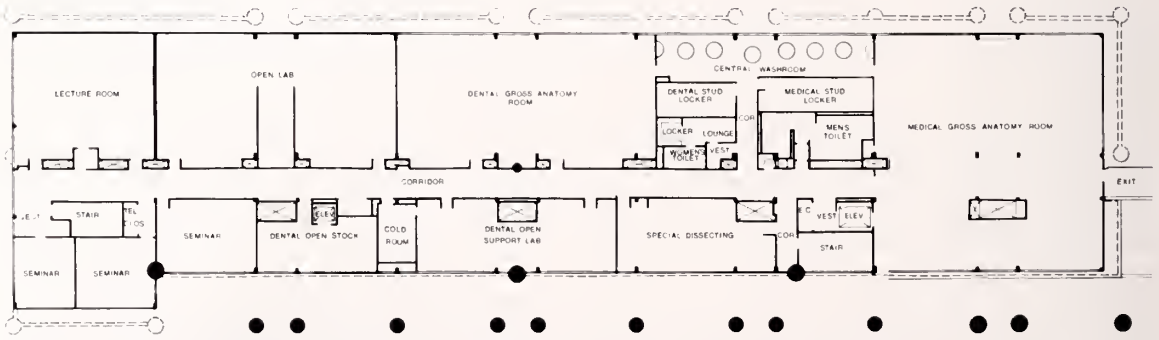


FIGURE 5 The third floor of the Health Sciences Building. This floor is designed primarily for anatomical dissections for medical and dental students and for the storage of bone sets. Also included is an open laboratory for teaching dental basic sciences, washrooms and lockers for students during their anatomy courses, and a special dissection room for graduate students and resident staff. The dental gross anatomy room is designed to be converted into a chemical laboratory when the dental course is not in session. This provides space for students working on research projects.

sition at a low bench or to sit down at a high bench. At the same location in each laboratory is a safety center which consists of an eye wash fountain, a fire shower, a first-aid kit, and a fire extinguisher. The student desks facing the conference area can be rotated backwards to allow large equipment, like physiographs, to surround the high bench. Immediately outside each unit laboratory is a locker for each student for his clothing and other personal effects.

Dissection Laboratories

Although the dissection laboratories themselves are traditional in layout, a unique system was designed to transfer cadavers from the receiving, embalming, and storage areas (Figure 7) to the dissection laboratories on the third floor. The system's basic ingredient is commonality among its components. The cadaver's pallet is designed to be accepted by the receiving or transfer cart, the embalming tables, the mortuary refrigerator, the dissection

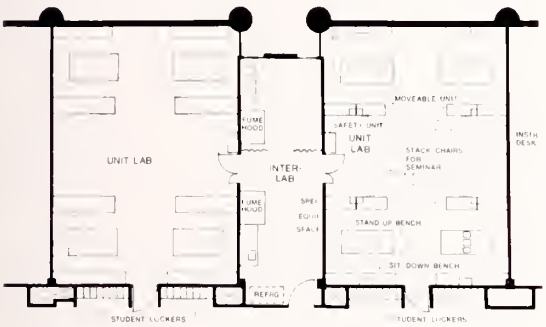


FIGURE 6 The typical unit laboratory provided for freshmen and sophomore medical students. Note the interlaboratory, the conference center, the safety center, and the instructor's station.

tables, and the variable lift cart. The variable lift cart is designed to load the pallet, no matter what its height, and is to be used for transferring the pallet from the embalming tables to the storage racks (four units high) and from the storage racks to the dissection tables. At all times the pallet slides on roller bearings, and transfer is made with a minimum of effort. There is direct elevator access for the transfer of cadavers to the dissection laboratories. Special attention was paid to the lighting design in the dissection laboratories. The complete ceiling is made up of fluorescent fixtures which deliver more than 300-foot candles of light. There is no need for the auxiliary surgical

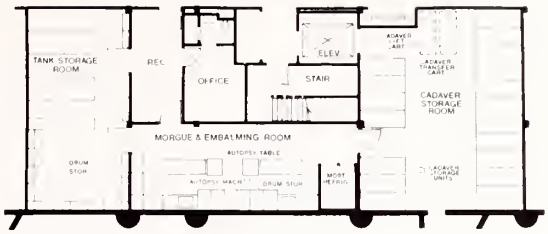


FIGURE 7 The cadaver receiving, embalming, and storage room located in the basement. The text best describes the special lift cart which facilitates the transfer of the cadaver pallet.

lamps which generally interfere with student movement around the dissection tables.

Operation of the Multidiscipline Laboratories

The laboratories are to be operated by a technical support group. Kits will be assembled in the basement in the kit assembly area (Figure 2) and brought up by elevator to the first, second, or third floors. Depending on the nature of the experiments, more material will be added from the microbiological media preparation laboratory on the first floor (Figure 3) and the chemical reagent preparation laboratory on the second floor (Figure 4). The kits will then be distributed horizontally to each laboratory. Each pair of unit laboratories shares an interlaboratory (Figure 6) which consists of a fixed hood and sink, but the rest of the wall space is free (except for utilities) to allow for positioning of mobile equipment. The laboratories are operated by a director who has his own laboratory space. He is to be assisted by an associate director, a secretary, and a technical staff.

Closed Circuit Television

Extensive use is contemplated of closed-circuit color television, with black and white TV monitors positioned where high resolution is required. Each pair of students will probably share one small TV monitor at their sit-down position. The instructor will have a large TV monitor directly above and behind his desk. There are six demonstration rooms and areas which will lend themselves to "wet" demonstrations for video taping of laboratory procedures. TV monitors will be located in all lecture rooms, seminar rooms, demonstration rooms, dissection laboratories, and even in

the student lounge. A mobile unit has been designed for video taping in remote areas. The TV central is located in the cross-over between the Health Sciences Building and the School of Dentistry (Figure 4). It consists of two studios for live programs and video taping of "dry" demonstrations and lectures, a central control and equipment room to monitor the distribution network and studio productions, a room for a video tape library and tape recorders, and a maintenance shop. A film island provides for the reproduction of kodachrome slides, color motion picture films and color microscope slides. The system has been designed for maximum versatility, with programs distributed to one room or any selection of rooms in the building. Of particular interest are the electronic study carrels in the Health Sciences Library. These contain TV monitors with video cartridge replay units which allow the student direct access to a video tape library.

Conclusion

These units were placed into operation Fall, 1970, so that it is too soon to evaluate the success of these new multidiscipline laboratories. They have generated great enthusiasm among the faculty and students, however, and make possible much more effective teaching programs than the traditional teaching facilities.

Acknowledgements

We wish to extend our thanks to Doctor Donn L. Smith, formerly Dean of the School of Medicine, for his vigorous support of our construction program and the multidiscipline laboratory concept; to all the members of the School of Medicine faculty, too numerous to mention, without whose cooperation the project could never have been brought into being; to Robert S. Hastings, Sigmund F. Blum, Howard G. Hakken, and Thomas H. Klausmeyer of Smith, Hinchman and Grylls, Architects, for development of the building program, design of the Health Sciences Center, and assistance in the preparation of the Federal construction grant application; to Doctors Joseph W. Bamberger, University of Southern California School of Medicine, Frederick A. Fuhrman, Stanford University School of Medicine, and Edra L. Spilman, Mt. Sinai School of Medicine of the City University of New York, for many helpful discussions during the design of the laboratories; and to Doctor Philip Davidson, formerly President of the University of Louisville who, with the University's administration, gave our project the University's enthusiastic endorsement and financial support. The senior author (RSL) is forever indebted to Doctors Richard C. Turrell, Collin S. MacCarty, and Leslie Van Nostrand, whose life support made much of his share of the work possible.

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Amputation in Hemophilia

G. S. Konior, Ewa Marciniak, M.D., Thomas Brower, M.D., and J. W. Yarbro, M.D.*

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Major surgery in the hemophiliac requires large amounts of factor VIII. A case of hemophilia requiring two surgical procedures is described, utilizing concentrates of AHF.

To achieve and maintain hemostasis during major surgery in a patient with hemophilia, factor VIII (AHF) must be used in a dose of at least 50 units/Kg of body weight.[1] One unit of AHF is defined as that amount contained in 1 ml of citrated normal human plasma, although assays of fresh bank blood and plasma prepared and diluted by ordinary methods have revealed only 0.3 units/ml and 0.5 units/ml of AHF, respectively.[1] Thus, to adequately prepare a patient for major surgery would require 150 ml/Kg of fresh blood or 100 ml/Kg of plasma, volumes which would certainly produce fatal circulatory overload. Furthermore, replacement must be frequent, since the biologic half-life of AHF is less than 12 hours, and with active bleeding, is further reduced. To reduce the volume delivered to the patient, a cryoprecipitate fibrinogen fraction containing AHF[2] or lyophilized AHF preparations[3] must be used; and with these preparations, major surgical procedures may be successfully carried out, providing the loading and maintenance doses of AHF are adequate.[4]

The purpose of this report is to describe a severe hemophiliac, who required a high thigh amputation because of an infected non-union of the femur and in whom the wound had to be packed open and subsequently closed by a second procedure because of the extensive amount of infection present. Massive therapy with AHF concentrates made possible the management of this complex problem.

Case Report

J. Mc. (#121760) was admitted to the University of Kentucky Medical Center for treatment of an infected compound fracture of the femur. He was 26 years old and had severe hemophilia A with a factor VIII level less than one per cent. Since early childhood he had suffered spontaneous bleeding into joints of ankles, knees, and elbows. His last external bleeding was at age 12 after a tooth extraction. Two brothers, an uncle, and a maternal cousin also had hemophilia.

On April 4, 1969, he was involved in an automobile accident, suffering an open comminuted fracture of the left femur and open comminuted fractures of both right and left tibia and fibula. He was admitted to a local hospital where he was treated with traction and casts. Over this period of time he received 84 units of fresh whole blood and fresh frozen plasma, but bleeding persisted. In spite of treatment with antibiotics, he became febrile and was transferred to UKMC on April 25th where, during a five-day period, he received cryoprecipitate from nine units of plasma. He was placed in a double-hip spica, and his temperature returned to normal after four days of treatment with cephalothin. At the time of discharge, there was no evidence of hemorrhage.

On May 4th he was re-admitted to his local hospital for bleeding around the left knee and temperature to 104°. He received eight units of packed cells and fresh frozen plasma and was treated with chloramphenicol. On May 10th he was transferred to UKMC because of continued bleeding. On admission his double-hip spica was observed to have blood stains

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around the left knee and his temperature was 102°. He received a total of nine units of cryoprecipitate and 16,500 units of purified AHF (Hyland Method 4). During this time he had daily temperature spikes to 102° and 103°, and culture of the cast grew *Staphylococcus aureus,* although blood cultures were negative. He received methicillin and improved. He was presumed to have osteomyelitis. On June 4th he was discharged.

His third admission to UKMC was from June 29th to August 8th. The left femur had not healed. There was no union of either the left femur or left tibia, and the thigh and leg were severely infected. Cultures of the wound showed an enterobacter species, *Serratia marcesens, Pseudomonas aerugenosa* and *Staphylococcus aureus.* It was decided that the leg could not be saved. No evidence for the presence of a circulating anticoagulant was found. On July 9th he received 6,000 units of purified AHF immediately prior to surgery, which brought the AHF level from 0 to 100 per cent. High thigh amputation was done through the infected area, and the wound was packed open.

Immediately following surgery the AHF level was 21 per cent. He received cryoprecipitate from six units of plasma that day and was then maintained for five days by infusion of 1500 units AHF administered every 12 hours and cryoprecipitate from six units of plasma every 12 hours, alternating in such a way as to provide an infusion every six hours. He was also treated with cephalothin and carbenicillin.

On the sixth day post-op the stump was closed. Immediately prior to surgery he received 3,000 units of purified AHF, which brought the AHF level from 15 per cent to 90 per cent, and immediately after surgery the level was 37 per cent. He then began spiking daily temperatures of 103°-105°, and blood cultures revealed *Candida albicans.* Amphotericin B was begun. He was maintained on AHF and cryoprecipitate during this time, with the daily dosage being gradually decreased until, by July 22nd, he was receiving 500 units of AHF every 12 hours, and the cryoprecipitate from two units of plasma every 12 hours, alternating to provide an infusion every six hours. On July 22nd he again began spiking daily temperatures to 103°, and an abscess was noted in the left thigh. Cultures of this abscess revealed *Pseudomonas aerugenosa* and *Staphylococcus aureus.* A right pleural effusion was noted on July 26th. He was begun on treatment with nafcillin, and a drain was placed in the wound. A thorocentesis was done July 28th. By July 31st his temperature had returned to normal. On August 1st his AHF was reduced, and on August 4th it was discontinued. Partial thromboplastin time done August 5th was 351 seconds.

Over the period of 41 days he had received a total of 13 units of fresh whole blood, 48,000 units of purified AHF, and the cryoprecipitate from 66 units of plasma. He was discharged on August 8th, at which time his temperature was normal. He is presently being followed by the Orthopedics Department. His stump is well healed. At no time during therapy with AHF concentrates was there any evidence of abnormal bleeding.

Discussion

This case illustrates the advantage of relatively long-term maintenance of blood factor VIII levels, using a combination of purified AHF and cryoprecipitate. Such maintenance permitted management of this complicated illness which involved two surgical procedures, abscess drainage, thoracentesis, and multiple infections. Maintenance of such blood levels, however, requires frequent infusion of AHF, preferably every six hours. Furthermore, such therapy is expensive. The cost of the blood used was $325.00, the cryoprecipitate was $1,020.00, and the purified AHF was $4,800.00, for a total replacement cost of $6,145.00. The cost per unit of AHF administered as the concentrate was approximately $0.10 and the cryoprecipitate was approximately $0.12. Thus, the cost of maintaining minimum blood levels in the patient for two

weeks after surgery, as shown in Figure 1, was in excess of $300.00 per day.

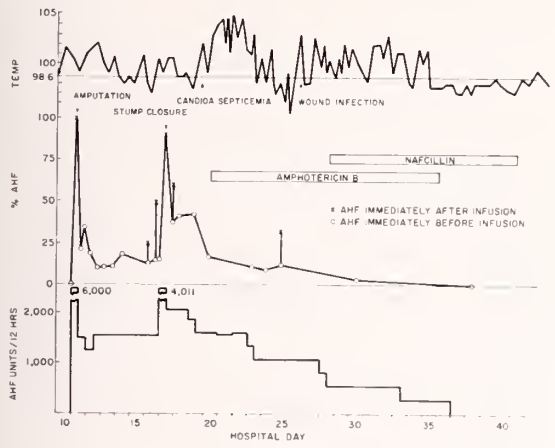


FIGURE 1 Clinical course of J. Mc. during his third hospital admission. The AHF units infused represent the total for each 12-hour period of purified AHF and cryoprecipitate. Since most of the points on the curve indicating per cent of AHF in the blood were measured immediately pre-infusion, this curve reflects the minimum blood level of AHF as a per cent of normal.

Kissick[5] has emphasized that some advances in medical science allow for prevention of disease and thus reduce cost, whereas others increase complexity and thus increase cost. Clearly, the development of factor VIII concentrates falls in the second category, although we now have the capacity to perform major surgical procedures previously impossible in the hemophiliac.

References

1. Rizza, C. R., and Biggs, R.: Blood products in the management of hemophilia and Christmas Disease. *Recent Advances in Blood Coagulation.* Editor, L. Poller. Little, Brown and Company, Boston, 1969.

2. Pool, J. G., and Shannon, A. E.: Production of high-potency concentrates of antihemophilic globulin in a closed-bag system. *New Eng. J. Med. 273:* 1443-1447, 1965.

3. Brinkhous, K. M., Shanbrom, E., Robetts, H. R., Webster, W. P., Fekete, L., and Wagner, R. H.: A new high-potency glycine-precipitated antihemophilic factor concentrate. *J.A.M.A. 205:* 613-617, 1968.

4. Combined clinical staff confetence at the National Institutes of Health. N. R. Shulman, Moderator. The physiologic basis for therapy of classic hemophilia. *Ann. Int. Med.* 67: 856-882, 1967.

5. Kissick, W. L.: Health Policy Directions for the 1970's. *New Eng. J. Med. 282:* 1343-1345, 1970.

Surgery for the Solitary Thyroid Nodule†

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Louisville, Kentucky

It is generally recognized that the solitary thyroid nodule may be a malignant neoplasm. Contrary to former beliefs, radioactive iodine uptake of the nodule is neither diagnostic nor discriminatory. Only surgical excision-biopsy of the nodule can reliably determine neoplasia.

THE clinical importance of the solitary thyroid nodule lies in the possibility that it may be cancerous or, if not so already, that it may later undergo cancerous metaplasia. Of secondary importance is the possibility that the nodule is or may become cosmetically undesirable, that it may develop a symptomatic and distressing thyroiditis, or that it may be an autonomous hyperfunctioning nodule, leading to the development of clinical Graves' Disease.[6]

In the author's experience, solitary thyroid nodules rarely respond significantly to endocrine manipulation. There is no known prophylactic treatment to prevent safely, unpleasant and dangerous complications such as thyroiditis or conspicuous enlargement, with or without local physical dysfunction. Most importantly, there is no reliable or highly accurate laboratory test, except histologic study of a fragment of the nodule under the microscope, to detect the presence of occult malignancy in such a nodule. While needle biopsy of thyroid nodules has been found by others to be safe and accurate, in our experience such biopsy is impractical, prone to local complications, and inaccurate enough to be a source of great dissatisfaction to the oncologist. In addition, the inadvertent capsular rupture and trauma to an occult malignancy suddenly discovered by such a biopsy is unacceptable to the oncologic purist.

An interesting analogy exists between the solitary thyroid nodule and the solitary breast nodule. In each, the ratio of cancer frequency is approximately one out of ten such solitary nodules, in either breast or thyroid.[2, 4] It is a surgical aphorism that the presence of a solitary nodule in a breast is, by itself, an indication for surgical biopsy. On the other hand, it is curious that a like indication for biopsy where the solitary thyroid nodule is concerned is a subject of great argument among surgeons and physicians.

Conservative opinion argues that thyroid cancer is an uncommon disease, its incidence being reliably reported as less than one per cent of all autopsies, whereas the incidence of breast cancer, in the United States alone, is reliably reported to be in the nature of 63,000 new cases each year.[2] One must realize, however, that patients with solitary thyroid nodules are already a highly selected population and that, among them, cancer of the thyroid is not rare or uncommon, but a distinct possibility in one out of ten cases.[4]

Hesitation to employ aggressive surgical measures for biopsy in thyroid nodules apparently is based on the following factors:

1. There are undoubtedly greater technical hazards to the precise surgical biopsy of the solitary thyroid nodule than for the biopsy of the solitary breast nodule.

2. The cosmetic exposure of the biopsy site and the possibility of obvious disfigurement are greater with the thyroid nodule than with the breast nodule.

3. Due to the abandonment of surgical therapy in favor of medical treatment for various thyroid conditions during the past twenty-five years, there are, consequently, fewer surgeons skilled in thyroid surgery than there are surgeons with the minimum basic ability to biopsy breast nodules successfully.

†*Presented at the Twelfth Annual Post-Graduate Medical Seminar, Norton Memorial Infirmary, December 18, 1969.*

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Management

The management of the patient with a solitary thyroid nodule should encompass a careful study of the background of the clinical picture by means of the usual thyroid profile studies, namely, PBI, T-3, and T-4 determinations, as well as an accurate delineation of the focal point of the picture, the nodule, by a careful scintillation scan study of the thyroid gland. If an autonomous hyperfunctioning nodule is suspected or found, it should be further qualified by repeating the scan after suppression of the surrounding and adjacent normally functioning thyroid tissue by Levo-Thyroxine or triiodothyronine.[6]

In 1962 Meadows[5] suggested reclassification of thyroid nodules into "hot," "warm," "cool," and "cold" types. He found a low incidence (5.4 per cent) of malignancy for the first three, but 55 per cent of "cold" nodules were reported to contain carcinoma.

Andrews, Atterson, and Ross,[1] in the same year, emphasized the difficulty of determining, absolutely, whether a thyroid nodule contained normal, reduced, or negligible amounts of radioiodine, thus casting doubt on the practicability of such precise classification as mentioned by Meadows.

In general, separation of solitary thyroid nodules into "nonfunctioning" and "functioning" groups suffices for clinical purposes. If this is done, one finds the surprising fact, pointed out by Kendall and Condon from the University of Illinois College of Medicine, that *there is no statistically significant difference in the incidence of hypofunction between benign and malignant nodules.* These authors also reclassified thyroid nodules into four types—"hot," "warm," "cool," and "cold" but, unlike Meadows, found that only 10.4 per cent of nonfunctional or "cold" nodules contained carcinoma.[4]

SOLITARY THYROID NODULES: RADIOIODINE SCANNING

Clinical classification	Histological classification	No. of patients	No. of satisfactory scans	Functional status of nodule (nos)				Incidence of hypofunctioning nodules (%)
				Hot	Warm	Cool	Cold	
Indeterminate	Benign	72	64	3	8	10	43	83
	Malignant	11	8	1	1	3	3	75
Probably malignant	Malignant	8	6	1	3	0	2	33

At present, conservative surgical opinion holds that surgical excision of all *hypofunctioning nodules* and of all proven *autonomous hyperfunctioning nodules* is highly desirable. A more aggressive practice, namely, *surgical excision of all solitary or dominant thyroid nodules regardless of function,* is favored by the author, and by other surgeons[4] in centers where much thyroid surgery is done.

Surgical Method

Although thyroid biopsy under local anesthesia as an outpatient procedure has been practiced in several large centers with very creditable results and although needle biopsy has its points and usefulness, it is the author's contention that surgical excision of the nodule by formal inpatient thyroid exploration and biopsy, lobectomy, or hemithyroidectomy, under general anesthesia, is preferable, for the following reasons:

1. The nodule, even if fairly sampled by needle biopsy, if benign, is not removed by this procedure, and the patient remains as before, with a lump about whose nature he is somewhat uncertain despite reassurance, and about whose importance (since much attention has been paid to it), he is highly conscious and apprehensive.

2. Despite statements to the contrary, complications, such as hemorrhage, cellulitis, and injury to neighborhood structures, do occasionally occur after needle biopsy.

3. After needle biopsy, the remainder of the thyroid gland or "background" of the picture remains unsampled and virtually unknown.

In contrast with the less aggressive method, open surgical biopsy of the thyroid nodule offers the following advantages:

1. The procedure is safe, virtually devoid of complications, and has an extremely low morbidity.

2. It affords an opportunity to inspect and palpate the entire thyroid gland, as well as the nodule, thus giving valuable "background" information.

3. The biopsy is precise and accurate.

4. It offers the opportunity for complete removal of the lobe or nodule.

5. It provides the opportunity for a concurrent ablation of the thyroid gland and for cervical lymphadenectomy or neck dissection if the diagnosis of carcinoma is firmly established at operation. This eliminates the undesirable necessity of re-entering, a few days later, a neck already compromised surgically, in order to carry out definitive treatment.

Operative Technic

Generally, it is held among thyroidologists and thyroid surgeons that lobectomy is the procedure of choice for removing a solitary nodule no matter what the size or position. This is advocated not only because lobectomy is a safe method of excising a potentially cancerous nodule without spillage, but also because lobectomy has been considered by some to be adequate surgical treatment for papillary, follicular, and mixed papillary and follicular carcinoma, if it appears grossly to be confined to the lobe.

Since we now know that thyroid carcinoma is multicentric and apt to be bilateral and since, even if unilateral, it is a great advantage later in the course of management of a patient with thyroid cancer to have the entire thyroid gland ablated at the first stage, the author employs simple lobectomy for biopsy of most nodules, reserving excision biopsy for centrally placed isthmic nodules. Should quick frozen section indicate carcinoma, the operation is at once extended to total thyroidectomy, with cervical lymphadenectomy or neck dissection added at the same stage, if histologic classification and diagnosis are firm and accurate. In the event that immediate biopsy is inconclusive, but later permanent section reveals cancer, the usual apathy and inertia about re-entering the neck for total thyroidectomy and regional-node dissection is circumvented; because lobectomy alone cannot be comfortably considered adequate definitive surgical therapy for cancer by the knowledgeable surgeon,[7] and, as James and Thurston have shown, morbidity and mortality rates of second thyroid operations are comparable to those of primary operations for thyroid cancer.[3]

Summary

1. The importance of the solitary thyroid nodule is that, like the solitary breast lump, it may be cancer.

2. Like the breast lump, the diagnosis of the solitary thyroid nodule is made under the microscope.

3. Like the breast lump, laboratory and radiologic tests, with a maximum accuracy little better than 80 per cent, are oncologically unacceptable.

4. Like the breast lump, although histologic diagnosis is possible by needle biopsy, most surgeons skilled in thyroid surgery prefer the open surgical approach of cervical exploration, and excision or resection, under general anesthesia, of the entire lesion, because:

a. If benign, the lesion is completely and permanently removed.

b. Adequate tissue is removed for histologic appraisal in depth, with estimation of capsular or vascular invasion, if cancerous.

c. The entire organ can be surveyed for multicentric involvement or ancillary changes.

d. If histologic diagnosis of cancer is certain, definitive surgical therapy can at once be carried out, including, if indicated, cervical lymphadenectomy or neck dissection in an uncompromised field.

5. The proper management of the solitary thyroid nodule is surgical resection.

References

1. Andrews, G. A., Atterson, B. W., and Ross, D. A.: In: *Progress in Medical Radioisotope Scanning: Proceedings of a Symposium,* p. 312. Oak Ridge Institute of Nuclear Studies, U.S. Atomic Energy Commission, Oak Ridge, Tennessee, 1962.

2. Farooki, M. A.: Epidemiology and Pathology of Cancer of the Thyroid." Part 1: Material, Methods and Results. *International Surg.* 51:232-243, 1969.

3. James, K. W., and Thurston, O. G.: Second Operations for Thyroid Carcinoma. *Canadian J. Surg. 12*:289-293, July, 1969.

4. Kendall, Leigh W., and Condon, Robert E.: Prediction of Malignancy in Solitary Thyroid Nodules. *Lancet 1*:1071-1073, 1969.

5. Meadows, P.: In: *Progress in Medical Radioisotope Scanning: Proceeding of a Symposium,* p. 296. Oak Ridge Institute of Nuclear Studies, U.S. Atomic Energy Commission, Oak Ridge, Tennessee, 1962.

6. Miller, J. Martin, and Block, Melvin A.: The Autonomous Functioning Thyroid Nodule: Therapeutic Considerations. *Arch. Surg.* 96:386-393, 1968.

7. Rose, Raymond G., Kelsey, Mavis P., Russell, William O., Ibanez, Michael L., White, Edgar C., and Clark, R. Lee: Follow-Up Study of Thyroid Cancer Treated by Unilateral Lobectomy. *Amer. J. Surg.* 106:494-500, 1963.



SPECIAL ARTICLES



Lawsuits v. Quality Surgery

The following statement concerning medical liability was recently received by the Editorial Board of this Journal from The American College of Surgeons. It was felt to be a topic of sufficient present interest to our subscribers to warrant reproduction in The Journal. Reprints may be obtained by writing the KMA Headquarters Office, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205.

The Regents of the American College of Surgeons feel obliged to inform the public that the rising number of lawsuits against physicians is seriously threatening the quality of surgical care and increasing its cost to patients.

Some surgeons feel compelled to treat patients under a concept which stresses avoidance of litigation rather than the application of their best clinical judgment.

Instead of attempting procedures which may cure the patient, but have a higher risk of failure and exposure to the threat of a lawsuit, some surgeons may prefer to use standard, proved, conservative methods which might bring relief to the patient, but will not cure him.

The rash of lawsuits has driven many other surgeons to still another extreme. To protect themselves against possible litigation, they are being forced to order costly tests and elaborate x-rays which under normal conditions would not be required.

It is not generally appreciated by the public that hazards are inherent even in well established surgical procedures. The practice of medicine is a combination of art and science. Even though medicine as a science is highly advanced, a precise result in treatment never can be guaranteed. Although the physician may demonstrate the highest possible knowledge and skill so that a jury would not be expected to find fault with his actions, it still might find against the doctor, simply because the doctor has insurance and the patient had a bad result.

To protect himself against unexpected litigation, a surgeon, like an automobile driver, must have adequate liability insurance. Because insurance companies are being required to pay out larger and larger compensation, they are finding it necessary to raise their premiums for doctors. Several insurance companies have ceased to issue professional liability insurance. In Hawaii, as well as in certain southwestern states, many surgeons are faced with non-renewal of their policies even though they never have been involved in any medico-legal action. This may force some surgeons to give up their practice, thereby aggravating the problem of an already deficient supply of physicians.

The Regents of the American College of Surgeons believe the problem extends beyond the profession and requires increased public awareness for its solution.

EDITORIALS

Happy New Year! Your Dues Are Due

The New Year, hopefully, will bring many blessings to all of us, to our families, our friends, and to all mankind.

The cynics among us may retort, of course, that whatever blessings may be bestowed upon us during the first month of 1971, they will most certainly be of the mixed variety. There will be the Christmas bills, income tax, and dues—to mention a few of the more unpleasant ones.

Dues to the Chamber of Commerce, the pledge to the church of our choice, and dues to the medical organizations to which we belong—and to which we owe so much!

January seems an appropriate time, therefore, to mention your dues to KMA and AMA—the tangible evidence of your support of organized medicine—and especially in view of the recently approved increase in dues of each association.

All too frequently, one hears in meetings around the state, or in doctor's lounges, "What do I get for my dues? What does KMA, or AMA, do for me?" Balanced against those critical questions is the recent statement of a young general practitioner, in practice for less than seven years, who says, "The dues I pay to the medical organizations to which I belong is the best money I spend each year."

The difference between these two positions lies in the fact that the young physician, as a result of his interest, diligence, and active participation in his organizations, has already been elected to offices and appointed to important committees. He is a "do-er"!

Most of the more vocal critics, on the other hand, have never held an office or accepted a committee assignment in organized medicine, nor do they attend meetings or read communications—which are designed to answer their questions.

Limitations of space preclude even the listing of all the things that KMA and AMA do for the profession and for the citizens of our Commonwealth and our country—not to mention the things, equally important, that our organizations keep from happening.

Descriptions of the tremendously varied activities of our associations in the fields of science, education, legislation, public health, socio-economics, and others, are readily available from the headquarters offices of the two groups and make very interesting reading—unless one is afraid of being confused by the facts.

There is no "perfect" organization in the world—one in which every member agrees 100 per cent of the time with every action taken by the group—and there never will be! Neither the KMA nor the AMA are perfect, but their policies and their actions are the results of the thinking and the hard work of sincere and dedicated physicians who have earned their positions on the Board and in the House of Delegates of the respective organizations.

It is disheartening, then, to hear a physician criticize organized medicine, and even withdraw his support, because he happens to have some personal disagreement with one or more of its policies—ignoring the many, many other areas, some of much greater importance, in which so much good is being accomplished.

As the years roll by, one can be certain that the young G.P. referred to above will agree with the writer that in all of the years he has worked in organized medicine, there remains the feeling that much more is gained than is given.

It is a fervent hope that each of you can share that feeling!

HENRY B. ASMAN, M.D.

Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Dear Editor:

Recently the Executive Committees of both the Louisville and Kentucky TB and Respiratory Disease Associations met with William P. McElwain, M.D., State Health Commissioner, to discuss the present problems and future solutions for the control of tuberculosis in Region Six. In addition to Jefferson County, Region Six is composed of the following counties: Bullitt, Henry, Oldham, Shelby, Spencer and Trimble. The citizens of Region Six should well recall the unfortunate shift of Hazelwood TB Hospital from the tuberculosis program to the Department of Mental Health as a result of legislative action.

That the Louisville and Kentucky TB-RD Associations, as well as the Jefferson County Medical Society, opposed the closing of Hazelwood TB Hospital by the 1970 General Assembly is a matter of record. Furthermore, the Louisville and Kentucky TB-RD Associations wish to go on record now as being in opposition to the inadequate proposals for tuberculosis control as submitted by the State Commissioner of Health and the Director of the Louisville-Jefferson County Health Department. The Commissioner has suggested the use of a 58-bed unit at Louisville Memorial Hospital to serve all of Region Six. In contrast to this figure, Hazelwood Hospital presently is caring for 73 active cases of TB from Jefferson County alone plus 16 active cases of TB from the other counties in Region Six. In addition, there are 25 TB suspect patients awaiting diagnoses. Add another ten patients from outside the region for surgery and other complications and there exists a total of 124 patients hospitalized at Hazelwood. The discrepancy is obvious—the implications are terrifying. We will be running a great risk of having a waiting list. Because tuberculosis is contagious, the public should not be exposed to patients with uncontrolled disease. If the proposed 58-bed unit is established, the various communities in Region Six will suffer greatly.

The program has already suffered the loss of experienced medical and other staff personnel. Indications are that other irreplaceable members will leave between now and June 30, 1971—the date of transfer for Hazelwood Hospital. Thus, the proposed inadequate TB control program is crippled before it begins.

A minimum of 80 beds has been proposed for the treatment of TB and other respiratory diseases in the new General Hospital to be completed five years from now. If 80 beds are to be needed then, surely 58 beds will not suffice now. Already a "credibility gap" is showing. Alternate proposals for other suitable facilities for present adequate tuberculosis control should be immediately investigated.

The Louisville and Kentucky TB-RD Associations urge you to call or write either Mayor Frank Burke, County Judge Todd Hollenbach, or Chairman of the Board of Aldermen, Carroll Witten, M.D., to obtain adequate and reasonable care for the tuberculosis patients of Region Six.

Arthur T. Hurst, M.D., President
Louisville TB-RD Association

William H. Anderson, M.D., President
Kentucky TB-RD Association

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ORGANIZATION SECTION

Varied Topics To Be Discussed At 1971 Interim Meeting

Liability Insurance, Medicine's Priorities, Congress and Health Care, and Health Care in Kentucky are among the topics to be discussed at the 21st Annual KMA Interim Meeting at Cave City, April 15-16.

The Meeting will open with a discussion on Liability Insurance moderated by Thornton Bryan, Jr., M.D., Cadiz. Several panel members, well-versed on this topic, will participate in the panel discussion.

The afternoon of April 15 will be free, so that KMA members, their families and guests can utilize the recreational facilities available at Cave City.

The Honorable Tim Lee Carter, M.D., Member, U.S. House of Representatives, will speak at the Thursday evening dinner. His subject will be "Congress and Health Care."

Friday morning, Carl Anderson, M.D., Santa Rosa, California, Member, National Blue Shield Board of Directors, will speak on "Peer Review and the Voluntary System." This will be followed by a discussion on Peer Review in Action led by Marvin A. Bowers, M.D., Louisville, Chairman, KMA Claims and Utilization Review Committee.

"Health Care in Kentucky" will be the topic of an address by William P. McElwain, M.D., Frankfort, Commissioner, State Department of Health.

Closing remarks by John C. Quertermous, M.D., Murray, President, Kentucky Medical Association, will conclude the program on April 16.

Regional Workshop Scheduled For February 4

A regional workshop on medical auditing and utilization review applications of the Professional Activity Study (PAS) and the Medical Audit Program (MAP) will be held in Louisville on February 4 at the Executive Inn.

Conducted by the Commission on Professional and Hospital Activities (CPHA), Ann Arbor, Mich., the event will be co-sponsored by the Kentucky Medical Association, the Kentucky Hospital Association, the Ohio Valley Regional Medical Program, and the Blue Grass Regional Health Planning Council.

Major emphasis of the formal presentations and laboratory sessions will be on effective and efficient use of medical staff committee time and efforts. The workshop is open to physicians, hospital administrators and trustees, health record analysts, medical record librarians, and health organization representatives.

The workshop is being announced to hospitals and health organizations in Kentucky, Tennessee, Virginia, West Virginia, Ohio, Indiana, Illinois, Missouri, and Arkansas. The registration fee is $35 for each person from a PAS hospital and $50 for each person from a non-PAS hospital. The fee includes all study materials and lunch. Early registration is urged, as registration is limited.

Program details and application forms may be obtained from CPHA, 1968 Green Road, Ann Arbor, Mich. 48105; telephone, area code 313, 769-6511.

Dr. Tim Lee Carter To Speak At KMA Interim Meeting

Tim Lee Carter, M.D., Member of Congress from Kentucky's Fifth Congressional District, was re-elected in November to a fourth term.



Doctor Tim Lee Carter

One of four MD's now in Congress, the sixty-year-old Congressman-Doctor has been interested in all phases of legislation at the national level and has put special emphasis on that which most affects his native state and his profession.

A native of Tompkinsville, he is a graduate of Western Kentucky University and the University of Tennessee Medical School. A combat medic in World War II, he practiced medicine in Monroe County for 20 years preceding his election to Congress in 1964.

On December 12, 1970, Doctor Carter accepted the invitation of KMA President, John C. Quertermous, M.D., Murray, to be the featured speaker at the 1971 Interim Meeting which will be held at Cave City in April. This will be an opportunity for all members of KMA to hear Doctor Carter and be brought up to date on health legislation facing Congress in 1971.

KEMPAC Workshop Planned

Saturday, February 6, through Sunday, February 7, are the dates selected for the KEMPAC workshop announced in the December *Journal*. The workshop will begin at 12:30 p.m. EST, at the Ramada Inn, 9700 Bluegrass Parkway, in Louisville and end at noon on Sunday.

The workshop is for KEMPAC Board members, the KMA Executive Committee and the KMA Committee on Legislative Activities. It is designed to establish guidelines for KEMPAC and to explore ways to expand membership.

PANMED Announces New Programs On Medical Subjects

Thomas L. Heavern, Jr. M.D., Highland Heights, recently announced the remainder of the 1970-71 program schedule for the PANMED Continuing Medical Education Television series. The programs are shown every Monday evening at 10:30 p.m. EST (9:30 p.m. CST) over the Kentucky Educational Television Network.

The first program of primary interest to physicians is entitled "Advances in the Treatment of Malignant Diseases" and will be shown January 25. Following the program four Kentucky physicians will discuss material presented during the show.

Other programs will deal with nursing, medicine, dentistry, and pharmacy. Programs on medicine include: "The Current Approach to the Hypertensive Patient," February 22; "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," March 29; "Immediate Post Operative Fitting of the Amputee," April 26; "The Transient Ischemic Attack," May 24; and "Physical Fitness and the Athlete," May 31.

Consult your newspaper for the ETV network station nearest you.

Medical Care Survey Planned By Health Statistics Center

The National Center for Health Statistics, as part of its continuing program to provide information on the health status of the American people, is currently planning a National Ambulatory Medical Care Survey (NAMCS). The purpose of this survey is to collect objective, quantitative information to measure and describe the types of ambulatory patients seen by physicians, the nature of patients' problems, and the resources available for their care.

Physicians selected to participate in the survey will provide information concerning a sample of the patients that they see during a two-day period in each of four consecutive calendar quarters. All physicians will be replaced by new sample physicians after participating for four quarters.

The types of data the survey will collect include age, sex, and medical problems of patients, plus treatment prescribed and laboratory tests performed for patients. All data will be held completely confidential and used only for statistical purposes.

The American Medical Association is taking an active part in the test survey by providing technical consultation and assisting in the induction of sample physicians into the survey.

J. Huston Westover, M.D., Whitesburg, was recently presented the Emerson Hospital Award for Excellence in Community Medicine. The presentation was made following the John E. Fogarty Seminar on "The Pursuit of Excellence in the Delivery of Health Care in America," held at the Boston Museum of Science.

In Memoriam

S. COOPER CLARKSON
Lebanon
1910-1970

S. Cooper Clarkson, M.D., the chief of geriatric services at the U. S. Veterans Administration Hospital in Lexington, died November 30. Doctor Clarkson graduated from Western Kentucky University and the University of Louisville School of Medicine. He practiced medicine in Lebanon from 1937 to 1962 and then joined the staff of the Lexington Veterans Hospital.

ROBERT F. LONG
Somerset
1920-1970

Robert F. Long, M.D., Somerset, died December 8. Doctor Long graduated from Tulane Medical School in 1948, interned at the Scott L. White Hospital, and served his residency in radiology at the Johns Hopkins Hospital in Baltimore, Maryland. He was formerly a Kentucky Medical Association Trustee, a Diplomate of the American Board of Radiology, a member of the American College of Radiology and a member of the Southern Medical Association.

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Drug Abuse Conference Held At Convention Center

About 8000 people attended a drug abuse conference held at Convention Center on December 3.

Experts in many different fields addressed the crowd and held panel discussions on all phases of drug abuse.

Dale Farabee, M.D., Commissioner of the State Department of Mental Health, announced that federal funds will be "forthcoming" to aid Kentucky's 21 Community Comprehensive Care Centers in drug prevention, treatment, and staffing.

State Superintendent of Public Instruction, Wendell Butler, said his department will develop drug instruction guidelines for teachers.

William Newman, State Commissioner of Public Safety, told the audience that a drug education program for state policemen will be started.

Medical Education Committee

Walter I. Hume, Jr., M.D., Chairman

KMA Headquarters Office — November 18, 1970

The 1971 KMA Conference on Medical Education was the main topic of discussion at the recent meeting of the KMA Medical Education Committee. The conference is designed for faculty members and private practicing physicians to discuss subjects of common interest.

Other agenda items discussed included an AMF-ERF joint fund raising appeal and nominations for the KMA Faculty Scientific Achievement Award.

NEWS ITEMS

W. Fayette Owsley, M.D., Burkesville, holds the distinction of being in practice longer than any other physician in Kentucky. Doctor Owsley is 91 years old and has been in family practice since 1901.

J. S. Bean, M.D., Elizabethtown, is the oldest practicing physician in Kentucky. Born in 1878, he graduated from the Hospital College of Medicine, Louisville, in 1904 and has been in family practice ever since that time.

Rafael A. Henriquez, M.D., is now practicing pediatrics in Henderson. Doctor Henriquez is a native of Colombia. He served his residency at the Variety Hospital in Miami, Florida.

Russell A. Hibbs, M.D., a native of South Williamson, has completed his military service and now has a practice in family medicine and allergy. He is practicing in Henderson.

Larry S. Wigginton, M.D., has joined Joseph Boggess, M.D., in family practice in Central City. Doctor Wigginton is a graduate of the University of Kentucky College of Medicine.

J. Russell Ross, M.D., Murray, has joined the Houston-McDevitt Clinic. Doctor Ross, in family practice, is a graduate of the University of Louisville School of Medicine. He recently returned to Kentucky after serving with the Medical Corps from 1968.

Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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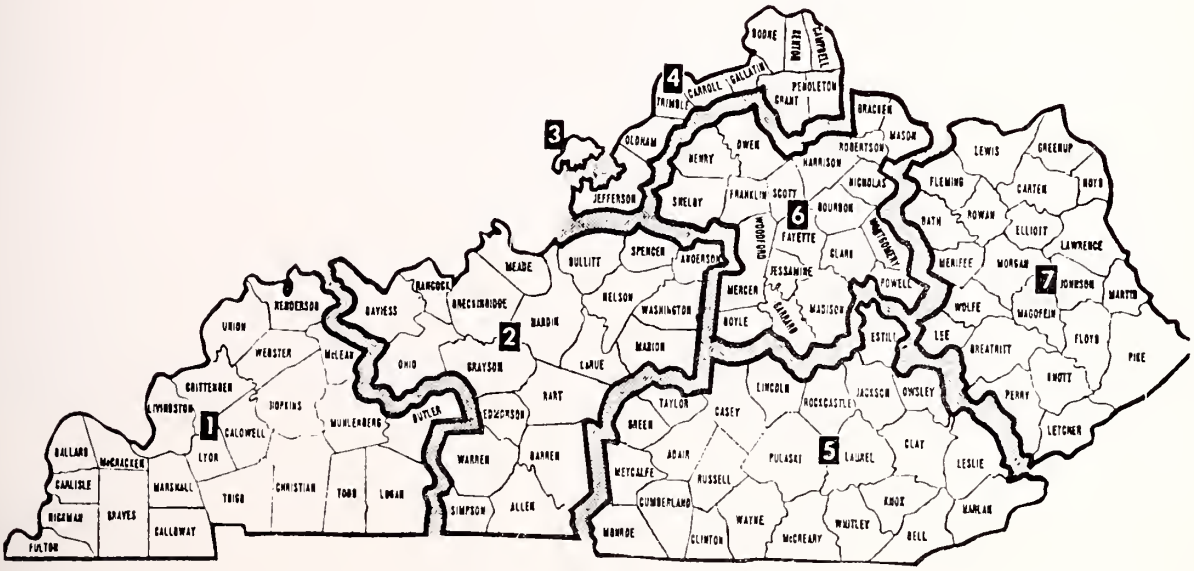
Hoyt D. Gardner, M.D., Louisville, Chairman for National Affairs of the KMA Committee on Legislative Activities, urges all physicians to become acquainted with their congressmen and points out that congressmen are interested in having the views of their constituents.

The Journal, in order to assist you in accomplishing this, gives the following information. You may want to remove this page and keep it in your files.

Your congressman may be reached by addressing him in Washington at the address below. The Washington, D. C., zip code for the senators is 20510; the zip code for the congressmen is 20515.

The salutation of a letter should be formal, as "Dear Congressman Stubblefield," unless you are a good friend. Then, "Dear Frank" is permissible.

In writing, the direct approach to the subject is preferred. Don't ramble. If the action is favorable, follow-up with a "thank you" note. It will be appreciated.



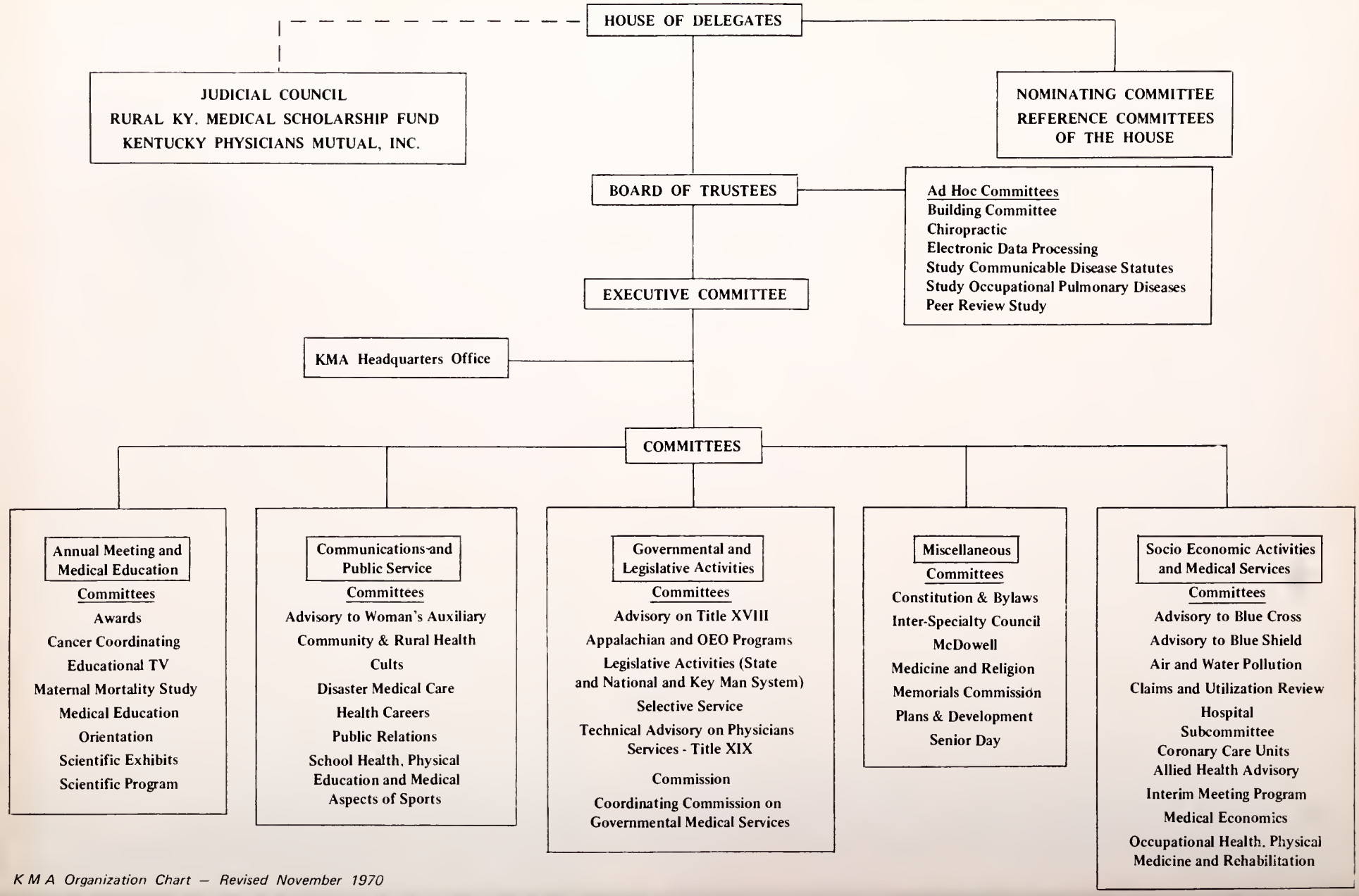
Kentucky's Seven Congressional Districts

CONGRESSMEN

District	Congressman	Address
1	Frank A. Stubblefield (D), Murray	Room 2422 Rayburn House Office Building
2	William H. Natcher (D), Bowling Green	Room 2333 Rayburn House Office Building
3	Romano L. Mazzoli (D), Louisville	Room 1017 Longworth House Office Building
4	M. G. "Gene" Snyder (R), Louisville	Room 516 Cannon House Office Building
5	Tim Lee Carter, M.D. (R), Tompkinsville	Room 1202 Longworth House Office Building
6	John C. Watts (D), Nicholasville	Room 2411 Rayburn House Office Building
7	Carl D. Perkins (D), Hindman	Room 2252 Rayburn House Office Building

SENATORS

Senator	Address
John Sherman Cooper (R), Somerset	Room 125 Old Senate Office Building
Marlow W. Cook (R), Louisville	Room 342 Old Senate Office Building



K M A Organization Chart — Revised November 1970



PROTEIN CONTENT / 7 oz. Serving*

Bean with Bacon	6.8	Green Pea with Ham (Frozen)	7.6
Beef	8.0	Hot Dog Bean	8.4
Chicken Broth	5.5	Pepper Pot	6.1
Chicken 'N Dumplings	5.8	Split Pea with Ham	10.2
Chili Beef	6.2	Vegetable Beef	5.0
Green Pea	6.9	Vegetable with Beef (Frozen)	5.4

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Actions—Demulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Demulen depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision. Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.



Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1,3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions; neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*: 267-279 (May) 1967. *2.* Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. *3.* Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. *4.* Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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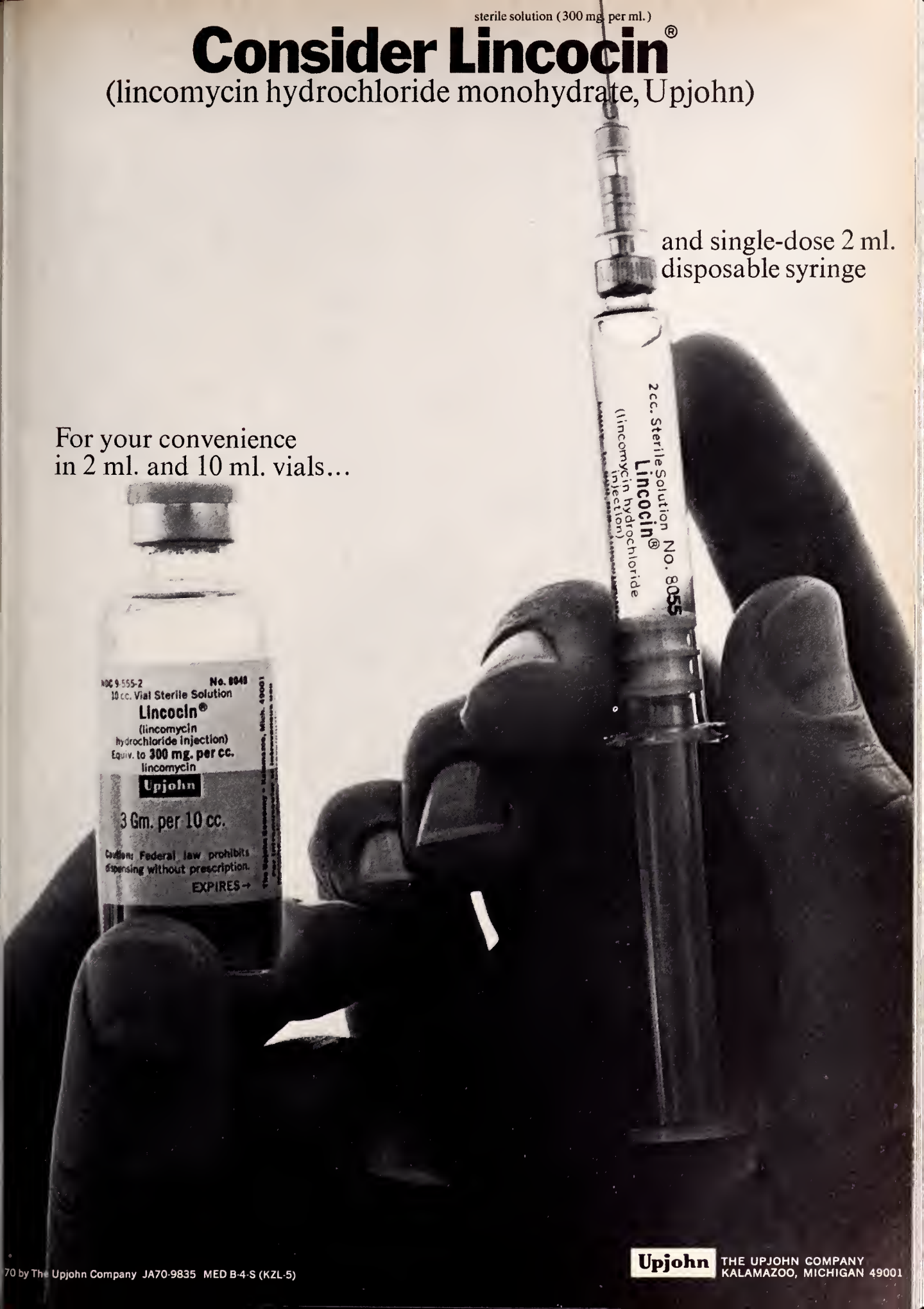
sterile solution (300 mg. per ml.)

Consider Lincocin®

(lincomycin hydrochloride monohydrate, Upjohn)

and single-dose 2 ml.
disposable syringe

For your convenience
in 2 ml. and 10 ml. vials...



70 by The Upjohn Company JA70-9835 MED B-4-S (KZL-5)

Upjohn THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN 49001

When irritable colon feels like this



The blowfish, a small species of fish, reacts to stress or fright by puffing itself up with air. After about a dozen noisy gulps the belly is balloon-shaped and hard. When replaced in the water the air is quickly expelled, and the fish sinks to the bottom

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

☐ belladonna alkaloids—for the hyperactive bowel ☐ simethicone—for accompanying distension and pain due to gas ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Like you,
your County Society Secretary
is a busy man.
He will appreciate your
cooperation in
paying your
County,
KMA, and
AMA dues.

Due
January 1, 1971
Delinquent
April 1, 1971

Kentucky
Medical Association

New Nilcol-
A Comprehensive
Formula:

DESCRIPTION	Contents in mg Tablet	Elixir—each 15 ml
phenylpropanolamine HCl	50	25
chlorpheniramine maleate	4	2
glyceryl guaiacolate	200	100
dextromethorphan HBr	30	15
alcohol		10%

The scored, elliptical tablet is light violet. The elixir is deep violet in color and grape-flavored.

ACTIONS Each component of Nilcol has been selected to pravide symptomatic relief of congestion and cough in upper respiratary disorders.

Phenylpropanolamine hydrochloride is a vasoconstrictor which reduces congestion of the nasopharyngeal mucasa. Chlorpheniramine maleate, a widely used antihistamine, helps to control allergic symptams. The expectorant is glyceryl guaiacolate which helps to increase the secretion and decrease the viscosity of fluids of the respiratory tract. Dextromethorphan is a well-known, centrally acting antitussive. Nilcal may minimize the need for topical decangestants.

INDICATIONS Nilcol is indicated for nasal and bronchial congestion; caughs and other symptoms of respiratory infections including influenza and the cammon cold; other respiratory conditians such as sinusitis, allergic rhinitis or hay fever.

CONTRAINDICATION Hypersensitivity to any ingredient.

PRECAUTIONS Because of the possibility of drowsiness, patients should be cautioned against driving and aperating machinery. Administer with caution to patients with hyperthyraidism, hypertensive cardiavascular disease, diabetes mellitus and liver disease. Use in pregnancy is not recommended.

ADVERSE REACTIONS Anxiety, restlessness, tension, insomnia, tremar, weakness, headache, vertigo, sweating, nausea, and vamiting may passibly occur.

SUPPLIED Tablets in bottles of 100. Elixir in bottles of 32 fl oz (1 qt) with dosage cups. N-GP-11-4C

WARNER-CHILCOTT
Morris Plains, New Jersey 07950

This is a test of this publication's advertising "Exposure." Please see below.

Introducing The Fully Therapeutic "Age-Calibrated" Non-Narcotic Cough/Cold Formula... For Any Member Of The Family*

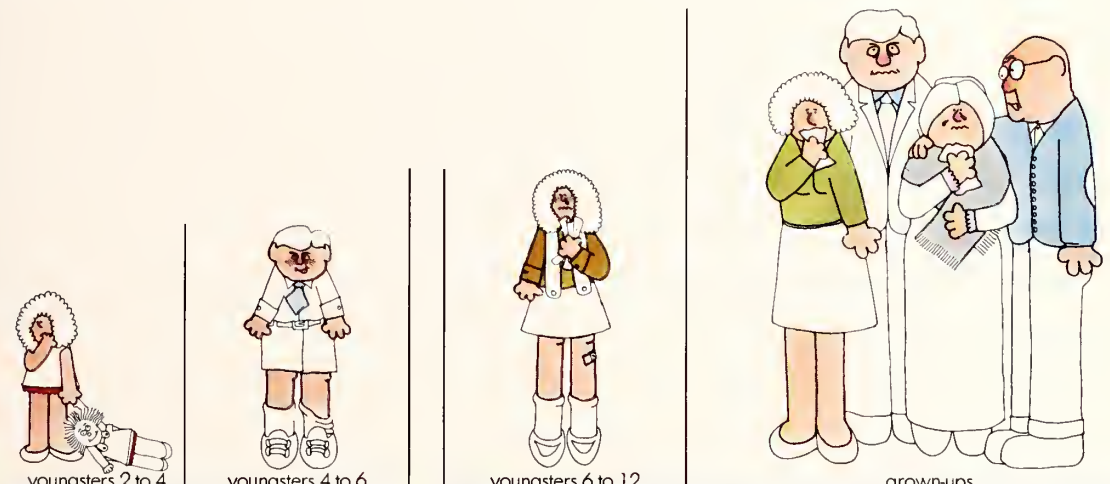
*Not for infants under 2 years of age.

New Nilcol™ Rx Tablets/Elixir

Each scored tablet contains: Phenylpropanolamine HCl 50 mg, Chlorpheniramine maleate 4 mg, Glyceryl guaiacolate 200 mg, Dextramethorphan HBr 30 mg.
Each 15 ml of elixir contains: Phenylpropanolamine HCl 25 mg, Chlorpheniramine maleate 2 mg, Glyceryl guaiacalate 100 mg, Dextramethorphan HBr 15 mg, alcohol 10%.

An Expectorant • An Antihistamine
A Decongestant • A Non-Narcotic Antitussive

For a complimentary package, send your Rx with the name Nilcol written on it to:
Warner-Chilcott Laboratories, 201 Tabor Road, Morris Plains, New Jersey 07950.
Att: M. Adams, St.J.



	youngsters 2 to 4	youngsters 4 to 6	youngsters 6 to 12	grown-ups
Prescribe 3 or 4 times daily				
Quick-Snop-Apart **Tablets**			½ tablet	one toblet
Delicious, Grope-Flovored **Elixir**	5 ml (1 tsp) †	10 ml (2 tsp)	½ oz (1 tbs)	1 oz (2 tbs)
Rx (4 doys — no-waste theropy)	3 oz	6 oz	8 oz	16 oz

†Plus "Age-Calibrated" Medicine Cup for Precision-Assured Dosage.

Someone acutely ill needs this bed.



It's available because of Medicenter.

Because of Medicenter, this hospital bed can be used by someone who needs it. That's what Medicenter is all about. A recuperative care facility specializing in the needs of patients who no longer require the intensive care of a general hospital and who are on the road to recovery.

But that's only part of the Medicenter story . . . Beautifully carpeted and draped patient rooms, tasty foods, recreation facilities, physical and inhalation therapy are just a few of many luxurious health care features that make recovery in the Medicenter as pleasant and rapid as possible. The Medicenter is within minutes of acute care facilities. A professional medical staff supervises all recuperative care under the direct orders of each patient's personal physician. Room rates are nominal — about one-half the cost of general hospitals. And there's a growing list of insurance companies that already provide coverage for Medicenter recuperation.

The Medicenter is a vital addition to our community's health care system. Get to know the Medicenter soon. Your visit or inquiry is welcome anytime.

MEDiCENTER
OF AMERICA

A Nice Place to Get Well

Medicenter of America / Hopkinsville • Louisville, Kentucky

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

'B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

Now that there's a greater therapeutic potential for treating Parkinson's disease and syndrome

...the information on these pages will be of practical interest to you

Larodopa® (levodopa) Roche : therapy that demands slow, individualized dosage titration

With the advent of new Larodopa (levodopa), there is now an agent that holds promise of relief of all the major symptoms of Parkinson's disease and syndrome—rigidity and akinesia as well as tremor.

However, as has been reported in the medical literature, levodopa demands slow, careful titration of dosage, and frequent patient monitoring. Adverse reactions may occur at any time, some serious enough to require dosage reduction or discontinuance of therapy. Thus, before prescribing, it is particularly important to refer to the following Important Therapeutic Considerations, the sections covering dosage and administration, and to the information on monitoring the patient (see prescribing information).

Important Therapeutic Considerations

Larodopa (levodopa) is an unusual drug which must be administered with particular care. In view of its high incidence of adverse reactions, you will find the following therapeutic considerations for Larodopa important:

(a) Larodopa is not curative and its mechanism of action is unknown, though postulated.

(b) Long-term safety and efficacy for Larodopa have not been established.

(c) Accurate diagnosis is imperative since there is no evidence that Larodopa is effective in neurological diseases other than Parkinson's disease and syndrome.

(d) About one-third of patients or more will not experience clinical improvement on Larodopa, and virtually 100% of patients will experience side effects of some degree.

(e) The dose of Larodopa producing maximal improvement with tolerated side effects must be *carefully titrated for the individual patient.*

(f) Finally, there is no evidence that early treatment with Larodopa, while possibly controlling symptomatology, alters the course of the disease.





Photographs of patients treated with Larodopa by permission of the patients.

Guide to dosage and administration of Larodopa® (levodopa) Roche

Usual daily dosage—initially, 0.5 to 1 Gm daily (divided in 2 or more doses with food).

Total daily dosage—increased gradually in increments of 0.125 to 0.75 Gm every 2 or 3 days, as tolerated.

Usual daily dose range—from 4 to 6 Gm given orally in 3 or more divided doses, with food.

Daily dosage should NOT exceed 8 Gm.

Optimal therapeutic dosage—usually reached in 6 to 8 weeks.

Establishing optimal dosage—must be determined and *carefully titrated for the individual*—gradually increase dosage until: (1) maximal response is seen, or (2) maximum recommended dosage is reached, or (3) side effects preclude further dosage increase, or require reduction or discontinuation of dosage.

Interrupted therapy—after brief interruption, dosage should again be adjusted gradually. (In many cases, the patient can be rapidly titrated to his previous therapeutic dosage. See "Precautions" section of Complete Prescribing Information.)

To underscore the extreme importance of careful dosage titration, the following week-by-week dosage pattern has been prepared, based on the assumption that the course of therapy is uninterrupted by any complications requiring a change in dosage. (Again, dosage must be reduced when intolerable side effects occur.)

Because it is absolutely imperative that Larodopa therapy be individualized to meet the particular needs of each patient, the following dosage schedule should be considered only a model.

Larodopa®
levodopa/Roche

Titration of Larodopa (levodopa) dosage in patient evaluated weekly

Intervals	0.25 Gm Tablets	0.5 Gm Tablets	Total Daily Dose
Week 1	½ tab (0.125 Gm) *q.i.d.* w/ food		0.5 Gm
Week 2	1 tab (0.25 Gm) *q.i.d.* w/ food		1.0 Gm
Week 3	1½ tab (0.375 Gm) *q.i.d.* w/ food		1.5 Gm
Week 4		1 tab (0.5 Gm) *q.i.d.* w/ food	2.0 Gm
Week 5		1½ tab (0.750 Gm) at breakfast and dinner. 1 tab (0.5 Gm) at lunch and bedtime	2.5 Gm
Week 6		1½ tab (0.750 Gm) *q.i.d.* w/ food	3.0 Gm
Week 7		2 tab (1.0 Gm) at breakfast and dinner. 1½ tab (0.750 Gm) at lunch and bedtime	3.5 Gm
Week 8		2 tab (1.0 Gm) *q.i.d.* w/ food	4.0 Gm

The daily maintenance dosage in the above example may be increased, decreased, or maintained at the 4 Gm level depending upon the point at which optimal therapeutic results are achieved.

Concurrent therapies: Larodopa (levodopa) may be used concomitantly with other antiparkinsonism drugs such as benztropine mesylate (Cogentin), trihexyphenidyl HCl (Artane) or procyclidine HCl (Kemadrin), but when more than one drug is used, the usual dose of each may have to be reduced.

Not to be given concomitantly: MAO inhibitors. Such agents must be discontinued two weeks prior to initiating Larodopa therapy.

Note of caution for patients who require vitamin supplementation: It has been reported that pyridoxine HCl (vitamin B_6) can rapidly reverse the antiparkinson effects of levodopa therapy.

A timetable for monitoring

While it cannot be emphasized too strongly that each patient on Larodopa must be treated as a totally *distinct* entity, the following are suggested as guidelines in the monitoring of such patients.

1. For the first month, at least: the average ambulatory outpatient should be seen and evaluated a minimum of *once a week.*

2. During the second month: patient evaluations can be extended to *every two weeks* (assuming no laboratory abnormalities or intolerable side effects have occurred).

3. From the third through the sixth month: the patient should be evaluated *once a month.*

4. After six months on the appropriate maintenance dose: with no significant adverse reactions or laboratory abnormalities, the patient should be seen at least *once every two months.*

5. Finally, after one year on maintenance dosage: evaluation should be made no less than *once every three months.*

Therapeutic response

A favorable response may often be seen within 10 days to several weeks. However, a patient should not be taken off a tolerable dose—even in the absence of a response—until six months have elapsed. This is because, in some instances, the response may come relatively late. Of course, any serious laboratory abnormalities or intolerable side effects automatically dictate discontinuance of therapy.

Lessening the side-effects problem

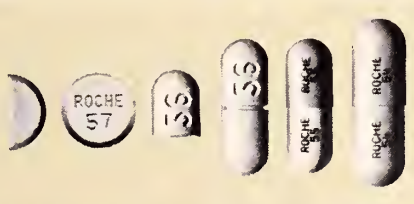
While it is generally advisable that levodopa be taken after meals, nausea and vomiting, two frequently occurring side effects of levodopa, can often be minimized by taking medication with foods. If nausea becomes intolerable, the dosage should be cut back in daily decrements equal to the most recent increments given the patient. This reduction is to be spaced over two- or three-day intervals. Conversely, as nausea subsides, the drug dosage should be slowly increased in like increments.

An important part of the routine monitoring procedure would be to determine any possible cardiovascular problems. If cardiac arrhythmias occur, Larodopa should be discontinued and other antiparkinson therapy instituted.

With orthostatic hypotension a possibility, checking the patient's blood pressure (both supine and standing) is essential.

If choreiform movements appear, they usually occur when maximum therapeutic dosages are reached. To control such effects, reduce dosage by decrements of 0.5 Gm daily.

Flexible dosage: scored tablets of 0.25 Gm and 0.5 Gm help simplify dosage titration



Conveniently scored 0.25 and 0.5 Gm tablets make possible more precise titration. Should another dosage form be preferred, Larodopa is also supplied in capsule strengths of 0.25 and 0.5 Gm.

Before prescribing, please consult product information on next page. →

For the relief of symptoms associated with Parkinson's disease and syndrome

Larodopa®
levodopa/Roche

Before prescribing, please consult complete product information, a summary of which follows:

BECAUSE OF THE HIGH INCIDENCE OF ADVERSE REACTIONS AND THE NECESSITY FOR INDIVIDUALIZING THERAPY, THE PHYSICIAN SHOULD THOROUGHLY FAMILIARIZE HIMSELF WITH THE INFORMATION IN THE PACKAGE INSERT BEFORE INSTITUTING THERAPY WITH LARODOPA (LEVODOPA). ACCURATE DIAGNOSIS IS IMPERATIVE BECAUSE EVIDENCE IS LACKING THAT LARODOPA IS EFFECTIVE IN NEUROLOGICAL DISEASES OTHER THAN PARKINSON'S DISEASE AND SYNDROME.

ADEQUATE CLINICAL AND LABORATORY FACILITIES SHOULD BE AVAILABLE FOR PROPER MONITORING OF TREATMENT.

THE LONG-TERM SAFETY AND EFFICACY OF LARODOPA HAVE NOT BEEN ESTABLISHED.

Indications: For the treatment of Parkinson's disease and syndrome. Useful in relieving many of the symptoms, particularly rigidity and bradykinesia; frequently helpful in management of associated tremor, dysphagia, sialorrhea and postural instability.

Contraindications: In patients for whom a sympathomimetic amine is contraindicated; in patients receiving MAO inhibitors (the latter should be discontinued two weeks prior to initiating therapy with Larodopa); in patients with clinical or laboratory evidence of **uncompensated** endocrine, renal, hepatic, cardiovascular or pulmonary disease; with narrow angle glaucoma and blood dyscrasias; in patients with known hypersensitivity to levodopa.



Warnings: Long-term safety and efficacy not established. Administer with extreme caution to patients with bronchial asthma or emphysema who may require sympathomimetic drugs; to those with active peptic ulcer (in facilities equipped to treat gastrointestinal hemorrhage) ; in patients with psychoses or severe psychoneuroses. Initiate therapy with extreme caution and in proper treatment facility in patients with a history of myocardial infarction who have residual atrial, nodal or ventricular arrhythmias. Monitor all patients for development of mental changes, depression with suicidal tendencies, other serious antisocial behavior. Carefully consider concomitant administration of pyridoxine hydrochloride (vitamin B_6); oral doses of 10 to 25 mg have been reported to rapidly reverse the antiparkinson effects of Larodopa. In pregnancy, weigh potential benefits against possible hazards. Do not use in nursing mothers. Safety of Larodopa in children under age 12 not established.

Precautions: During extended therapy, periodic evaluations of hepatic, hematopoietic, cardiovascular and renal function recommended. In diabetic patients, control may be adversely affected; careful, frequent monitoring and proper adjustment of antidiabetic regimen required. Patients with chronic wide angle glaucoma may be treated cautiously provided intraocular pressure is well controlled and patient is monitored carefully. Monitor carefully patients receiving antihypertensive agents or psychoactive drugs concomitantly, or those with history of convulsions. If general anesthesia is required, discontinue Larodopa 24 hours prior to surgery; monitor cardiorespiratory functions carefully. Patients who improve on Larodopa therapy should resume normal activities cautiously. May be used concomitantly with other antiparkinson drugs with possible reduction in dosage of each.

Adverse Reactions: *Most frequently occurring:* nausea, anorexia, emesis, cardiac irregularities, orthostatic hypotension; choreiform, dystonic and other adventitious movements; dizziness, sedation, dyskinesia; psychiatric symptoms such as agitation, anxiety, confusion, depression, hallucinations, delusions, insomnia, nightmares, and mental changes including paranoid ideation and psychotic episodes. *Less frequently occurring* and listed according to system: *psychiatric*—suicidal tendencies, increased libido with serious antisocial behavior, euphoria, lethargy, stimulation, fatigue and malaise, dementia; *neurological*—ataxia, convulsions, faintness, impairment of gait, headache, increased hand tremor, akinetic episodes, torticollis, trismus, oculogyric crisis, weakness, numbness, bruxism; *gastrointestinal*—constipation, diarrhea, epigastric and abdominal distress and pain, flatulence, eructation, hiccups, sialorrhea, difficulty in swallowing, bitter taste, dry mouth, tightness of mouth, lips or tongue, duodenal ulcer, gastrointestinal bleeding, burning sensation of the tongue; *cardiovascular*—nonspecific ECG changes, palpitations, hypertension, flushing, phlebitis; *hematological*—hemolytic anemia (1 case); *dermatological*—sweating, edema, hair loss, pallor, rash, bad odor; *musculoskeletal*—low back pain, muscle spasm and twitching, blepharospasm, musculoskeletal pain; *respiratory*—feeling of pressure in the chest, cough, hoarseness, bizarre breathing pattern, postnasal drip; *urogenital*—urinary frequency, retention, incontinence, hematuria, nocturia, and one report of interstitial nephritis; *special senses*—blurred vision, diplopia, dilated pupils, activation of latent Horner's syndrome; *other*—fever, hot flashes, weight gain or weight loss.

Nausea, anorexia and vomiting usually obviated by temporary dosage reduction and/or administration with food. If cardiac arrhythmias occur, discontinue and institute other antiparkinson therapy. Reduce dosage when involuntary movements occur.

The following have been noted: elevation of BUN, SGOT, SGPT, LDH, bilirubin, alkaline phosphatase or PBI; occasionally, reductions in WBC, hemoglobin and hematocrit; elevations of uric acid with use of colorimetric method but not with uricase; rarely, positive Coombs test; dark sweat and urine.

Dosage and Administration: Because of the strong possibility of adverse reactions and the necessity for individualizing therapy, the physician should thoroughly familiarize himself with the information in the package insert before instituting therapy.

How Supplied: *Tablets*, pink, scored, containing 0.25 Gm levodopa (imprinted Roche 57) or 0.5 Gm levodopa (imprinted Roche 56)—bottles of 100 and 500.

Capsules, containing 0.25 Gm levodopa (pink and beige, imprinted Roche 55) or 0.5 Gm levodopa (pink, imprinted Roche 54)—bottles of 100 and 500.

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

The girth control pill



Tepanil® Ten-tab

(continuous release form)

(diethylpropion hydrochloride)

works on the appetite not on the 'nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Controindicotions: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastraintestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-006A / 1/70 / U S. PATENT NO 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

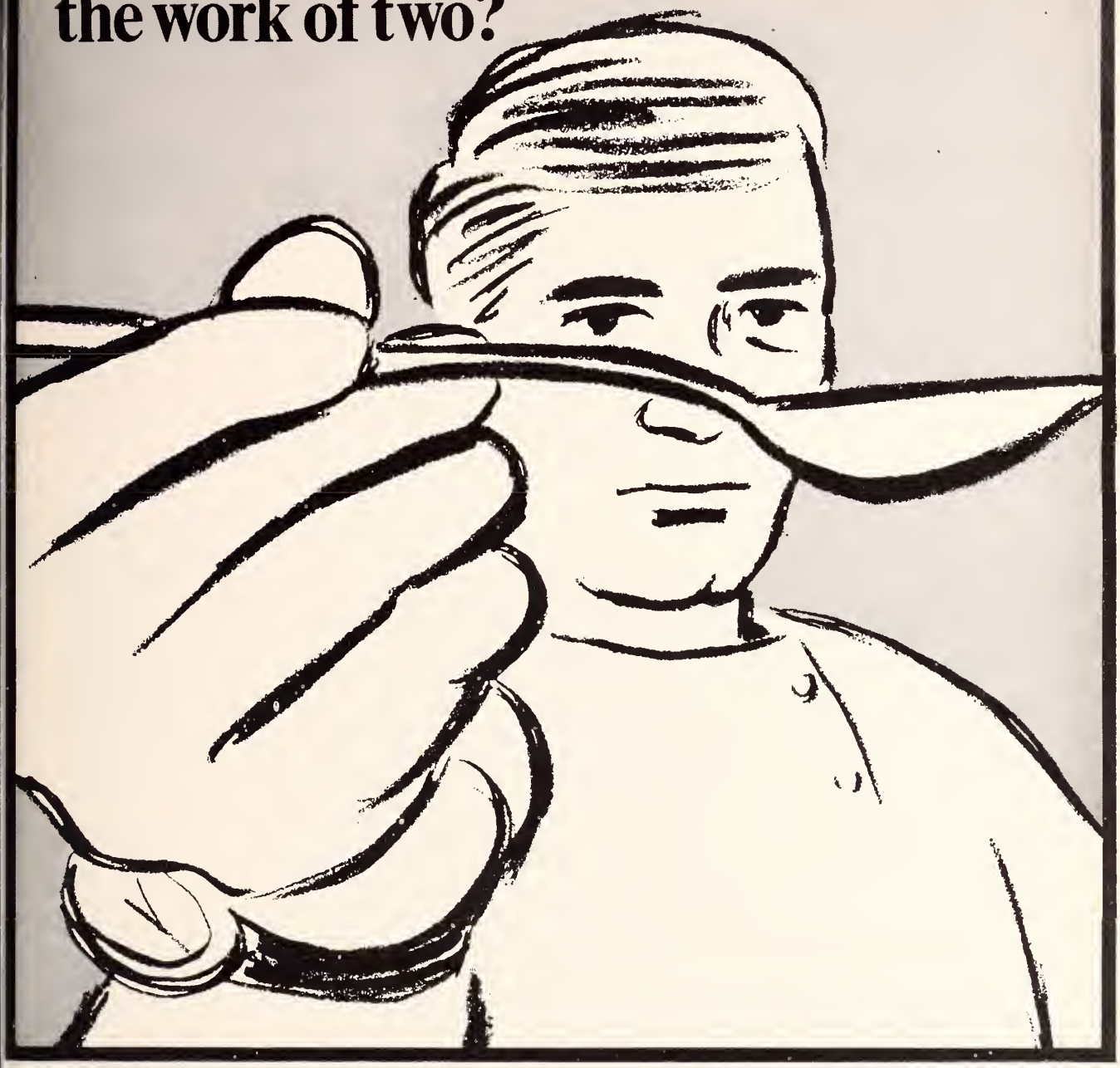
Prescribing Informotion—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reoctions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosoge:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps

Can one prescription do the work of two?



Yes, Kolantyl®.

Kolantyl Gel/Wafers contain aluminum hydroxide/magnesium hydroxide, and Bentyl® (dicyclomine hydrochloride) too.

Merrell

The Wm. S. Merrell Company
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

0-2572 (2172)

Efudex®
(fluorouracil)
cream/solution

In the treatment of solar/actinic keratoses –
An alternative to cold, fire and steel

2/23/68
Before treatment with 5% 5-FU cream. Patient R. G., 78 years old, shows extensive skin changes due to weathering and severe solar/actinic keratoses.

3/26/68
Following one month of therapy. Intense erythematous reaction is seen at sites of keratoses. Normal skin has not reacted. Some areas which had reacted initially have undergone healing despite continued topical application of 5% 5-FU.

6/11/68
Ten weeks after discontinuance of therapy. All areas have healed completely. Residual mild erythema remains in some areas. This patient also had seborrheic keratoses which, as expected, have not reacted. There is no evidence of residual lesions or recurrences.



ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

An alternative to conventional therapy

Efudex (fluorouracil) offers the physician a topical alternative to cryosurgery, electrodesiccation and cold-knife surgery in the treatment of solar/actinic keratoses. It is effective, comparatively inexpensive and especially well suited for treatment of these multiple lesions. Important, too, is the highly desirable cosmetic result. Clinical experience demonstrates that treatment with Efudex results in an extremely low incidence of scarring.*

Highly effective

In clinical trials, depending on the dosage form and strength used, complete involution occurred in 77 to 88 per cent of lesions following treatment. The rate of recurrence was low, ranging from 1.7 to 5.6 per cent up to a year after completion of therapy. When new lesions appeared, repeated courses of Efudex therapy proved effective.*

Predictable therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two or three months before gradually receding. Since this response is so predictable, lesions which do not respond should be biopsied.

Two strengths—two dosage forms

Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, two important considerations: First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann - La Roche Inc., Nutley, New Jersey.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Efudex Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing-cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



new
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imipramine hydrochloride USP

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imipramine hydrochloride

Indication: Depressive states of diverse psychopathology.

Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 14 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed. The drug is also contraindicated (a) during the acute recovery period after myocardial infarction, (b) in patients with known hypersensitivity to the drug. Cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: Usage in Pregnancy: Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

- patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
- patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
- hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
- patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
- patients receiving guanethidine or similar agents since Tofrānil, brand of imipramine hydrochloride, may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

Since the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: It should be kept in mind that the possibility of suicide in seriously depressed patients is inherent in the illness and may persist until significant remission occurs. Such patients should be carefully supervised during the early phase of treatment with Tofrānil, brand of imipramine hydrochloride, and may require hospitalization. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, Tofrānil, brand of imipramine hydrochloride, may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine hydrochloride should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine hydrochloride with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential, since there is limited clinical experience.

Adverse Reactions: Note: Although the listing which follows includes a few adverse reactions which have not been reported with this specific drug, the pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when imipramine is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

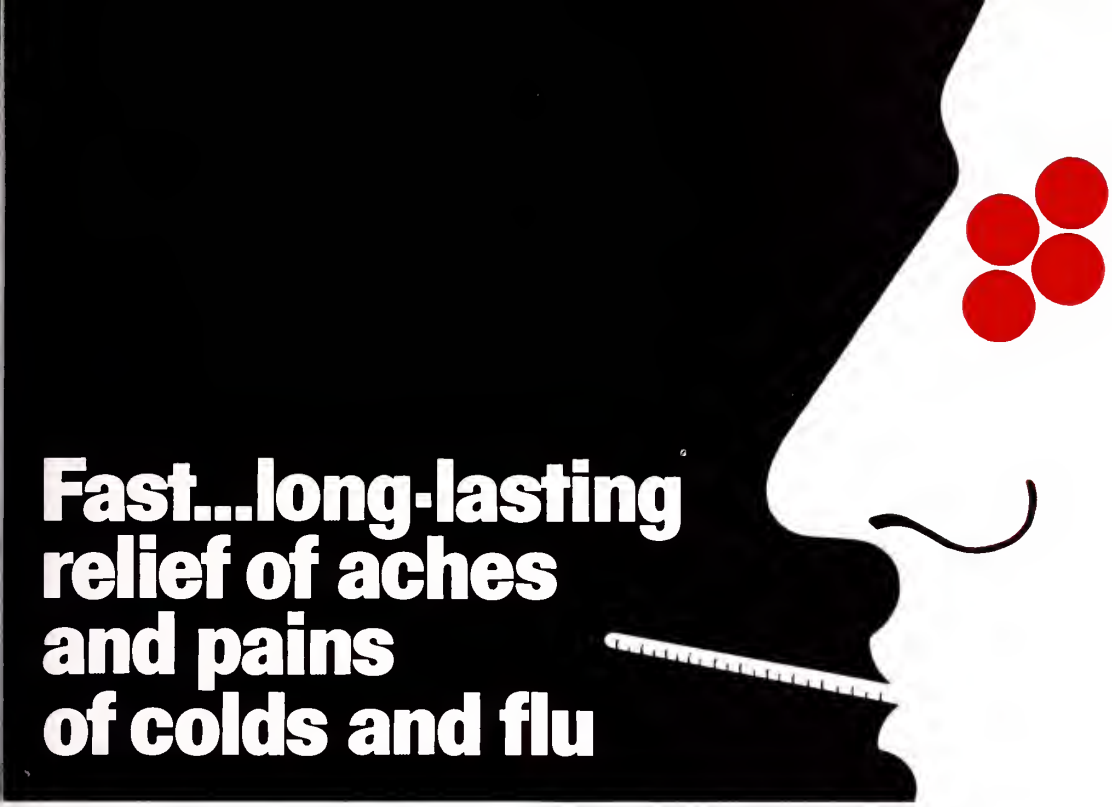
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Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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VOLUME 69 FEBRUARY 1971 NUMBER 2

The Journal of The KENTUCKY Medical Association



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KMA 1971 INTERIM MEETING
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Menrium® treats the menopausal symptoms that bother him most.



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His wife has a lot of different menopausal symptoms, but only a few really irritate *him*. Her hot flashes, her vertigo, her palpitations—that's *her* problem. What really bothers him is her nervousness, her irritability and her excessive anxiety, often expressed by endless "book-shuffling, chain-smoking, reading-lamp" insomnia!

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So, to help them both get through *her* menopause, remember Menrium.



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Indications: Management of manifestations generally associated with the menopausal syndrome—anxiety and tension, vasomotor complaints and hormonal deficiency states.

Contraindications: Women with cancer of breast or genitalia, except inoperable cases, and those with known hypersensitivity to chlordiazepoxide and/or esterified estrogens.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Exclude other possible causes of menopausal syndrome manifestations, such as pregnancy. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) similar to those seen with barbiturates have been reported following discontinuance of chlordiazepoxide HCl. Potential benefits of use in pregnancy, lactation or women of childbearing age should be weighed against possible hazards to mother and child. Clinical data inadequate on safety in pregnancy.

Precautions: In elderly and debilitated patients, limit dosage to smallest effective amount of chlordiazepoxide (initially 10 mg or less per day) to preclude ataxia or oversedation; increase gradually as needed and tolerated. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects—particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in patients with impaired renal or hepatic function. Paradoxical reactions to chlordiazepoxide (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in the treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation very rarely reported in patients receiving Librium® (chlordiazepoxide) and oral anticoagulants.

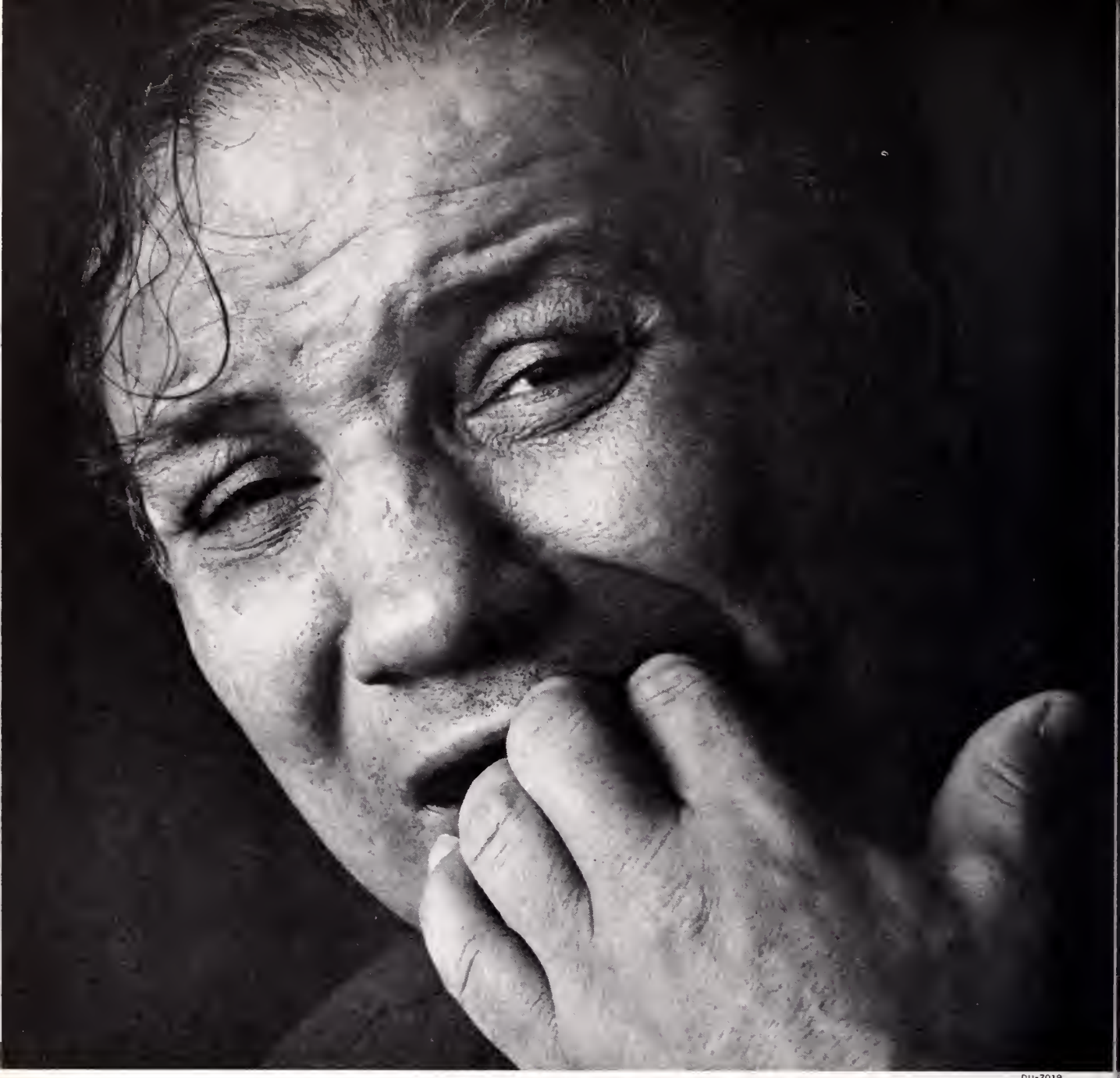
Adverse Reactions: Untoward effects seen with either compound alone may occur with Menrium. With chlordiazepoxide, drowsiness, ataxia and confusion reported in some patients, particularly in the elderly and debilitated; while usually avoided by proper dosage adjustment, these are occasionally observed at lower dosage ranges. Also reported have been a few instances of syncope; isolated occurrences of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido, and occasional reports of blood dyscrasias, including agranulocytosis, jaundice and hepatic dysfunction. Periodic blood counts and liver function tests advisable during protracted treatment. Changes in EEG patterns (low-voltage fast activity) observed during and after chlordiazepoxide treatment.

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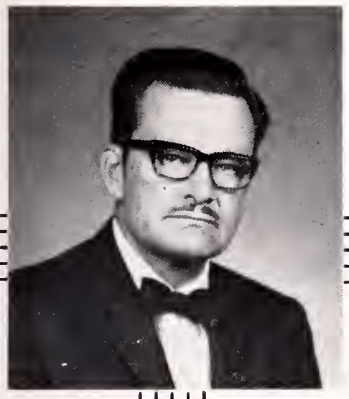
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MESSAGE FROM THE PRESIDENT



Medical Care in Poverty Areas

Despite our setbacks of the past few years, we have still been lucky in having a voice in the formulation of laws and regulations pertaining to the practice of medicine and medical care in general. There is one jarring note, however, that I feel should be discussed, and that is the recent signing into law a bill that provides $65,000,000 for the purpose of providing "incentives" to physicians to practice in poverty areas. This law, as I understand it, will pay salaries to physicians to practice in these areas, and the fees (from insurance, Medicare, etc.) will revert to the federal government.

The AMA did not publicize or protest it greatly, but made testimony simply by issuing a statement of AMA policy concerning such things. The bill passed the Senate, 66 to nothing, in August, and the President signed it into law the other day.

As I suggested, despite our previous disappointments, this is the first grand experiment in seeing how true socialized medicine will work. The trouble with such federal laws is that they must be all inclusive, and every area must be treated the same regardless of unique differences. In this case, the ridiculous grouping of the ghetto areas with rural poverty areas for the same treatment is discouraging. You can well imagine the difference in approaches that should be made in solving a community medical problem in Watts, Los Angeles, and the rural poverty stricken counties in Kentucky or West Virginia.

One common ground would be that a young physician would be quite apprehensive about investing thousands of dollars to set up an office, in such areas, that very likely could not be paid for without a great deal of luck. In the case of the ghetto area there is a good possibility that he couldn't get insurance on the office—then there is the problem of personal safety.

I can't see anything wrong with the government owning an office and equipment, in such areas, that could be rented to a young doctor while he collects his fees in the usual manner. This would remove the fantastic personal gamble

(Continued on next page)

(Continued from page 77)

that would inhibit the young doctor's entering private practice in such areas. This is as far as the government should, and would need to, go in providing incentives except for one thing - - - - -

A doctor can have his home in nice surroundings in a city and commute to his practice in the ghetto; while, in a rural poverty area he would almost have to be in residence and leave educational and cultural opportunities for his family up for grabs. A man doesn't decide to deprive his family of these advantages very easily.

Local, state, and federal government should go to bat and find a way to make these areas livable and attractive. Although we are blamed for much that is wrong in these areas, it is not the doctor's fault that these areas are unlivable, and we should insist that these things be approached on their overall merits, and the medical profession quit being blamed for shortages of every description in these economically deprived areas. If disease from malnutrition or ignorance is there, it's not our fault, and we can't cure it as physicians.

Few people live in many of these areas by choice—where there may be no sewerage, adequate heat, adequate schools, maybe not even a Ford garage. Let's insist that these things be looked at as they are and not like a lot of "radiclibs" (thanks Spiro) would panic us into thinking they are.

This month, I would like to close my message with a special note of thanks to the members of the KMA Judicial Council, who are doing a masterful job for KMA and all Kentuckians. I would also like to direct your attention to page 110 in this issue of the *Journal,* and request that you read the AMA Judicial Council Report entitled "Professional Ideals," which was adopted by the AMA House of Delegates this past December.



Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

FEBRUARY

14-20 Postgraduate course, "General Practice Review," designed to assist those who are preparing for family medicine board examinations or who wish an intensive review of clinical problems. University of Kentucky and Kentucky Chapter, AAFM; fee $125. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

22 PANMED television series, "The Current Approach to the Hypertensive Patient," KET 10:30 p.m. EST (9:30 p.m. CST)

25-27 Symposium, "Modern Methods for the Medical Work-up," University of Kentucky Medical Center, Lexington

MARCH

11-13 17th Annual Symposium on Cardiovascular Diseases, Heart Association, University of Louisville School of Medicine, KAGP, Stouffer's Louisville Inn, Louisville

29 PANMED television series, "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

APRIL

1 16th Annual Spring Clinical Conference, Lexington Clinic, Symposium on Infectious Diseases, Lexington

15-16 KMA Interim Meeting, Holiday Inn Motel, Cave City

26 PANMED television series, "Immediate Post Operative Fitting of the Amputee," KET 10:30 p.m. EST (9:30 p.m. CST)

28-30 Symposium on Inflammatory Diseases of the Gastrointestinal and Biliary Tracts, Albert B. Chandler Medical Center, Lexington. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

IN SURROUNDING STATES

FEBRUARY

24-25 Postgraduate course, "A Review of Connective Tissue Diseases by Systems: Manifestations and Management," Cleveland Clinic Educational Foundation, Cleveland, Ohio

MARCH

3-4 Postgraduate course, "Update 1971—Selected Topics in Nursing," Cleveland Clinic Education Foundation, Cleveland, Ohio

10-11 Postgraduate Course, "Advances in Urology," Cleveland Clinic Educational Foundation, Cleveland, Ohio

25-26 National Conference on Rural Health, "Community Health Programs for Tomorrow," American Medical Association, Atlanta, Georgia

APRIL

3-4 Southeastern Dermatological Association, Medical College of Georgia, Augusta, Georgia

17-18 23rd Annual Lectures in Diagnostic Radiology, University of Cincinnati College of Medicine, Cincinnati, Ohio

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can to avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

The CHAMPUS Program

Q. What is CHAMPUS?

A. CHAMPUS is an abbreviation for the Civilian Health and Medical Program of the Uniformed Services. It is a governmental program, (Public Law 569 and the Military Medical Benefits Amendments of 1966) administered in Kentucky by Blue Cross and Blue Shield.

Q. Who is eligible for CHAMPUS benefits?

A. 1. The wife of an active duty, retired, or widow of a deceased service member of the uniformed services.
2. Unmarried dependent children under age 21, including legally adopted children and stepchildren.
3. Dependent children, age 21 and over, if incapable of self-support because of a mental or physical incapacity which existed prior to age 21, or if enrolled in a course of study in an approved institution of higher education, and less than 23 years of age.
4. Retired service members.
5. An active duty serviceman is NOT eligible for benefits under the CHAMPUS Program.

Q. Who is responsible for issuing identification cards to CHAMPUS beneficiaries and for advising them of the benefits for which they are eligible?

A. The federal government or the appropriate military facility. Our contract with the government is to keep providers of service informed regarding benefits and billing procedures and to pay claims.

Q. What are the authorized services and supplies covered under CHAMPUS?

A. The diagnosis and/or treatment of: (1) Acute and chronic medical or surgical conditions, and contagious diseases, (2) Complete obstetrical care including care of newborn infants, (3) Mental and emotional disorders, and (4) Dental conditions as an adjunct to the treatment of medical or surgical conditions.
Other authorized services and supplies include: (1) Ambulance service, (2) Whole blood or blood products, (3) RX drugs, (4) Diagnostic tests including x-ray, laboratory, radioactive isotopes, BMR, EEG, and EKG, (5) Physical therapy, (6) Radiation therapy, (7) Orthopedic braces (except shoes and crutches), (8) Artificial limbs and eyes, and (9) Rental of durable medical equipment.

Q. Are any services or supplies excluded from coverage under CHAMPUS?

A. Yes. The following are some services and supplies not covered under CHAMPUS: (1) Domiciliary or custodial care, (2) Eyeglasses and hearing aids, or examinations to correct ordinary refractive errors, (3) Prosthetic devices and orthopedic shoes, (4) Routine physical examinations and routine well-baby care, and (5) Routine dental care, not adjunctive to treatment of medical or surgical conditions.

Q. What form should physicians use to report authorized services rendered to CHAMPUS beneficiaries?

A. The buff colored, DA Form 1863-2, revised June, 1967, should be used by physicians. For additional forms please contact: CHAMPUS Fiscal Agent, Blue Cross Hospital Plan, Inc., 3101 Bardstown Road, Louisville, Kentucky 40205.

Q. Will all authorized physicians' services be paid in full by CHAMPUS?

A. No. In most instances, payment is made on a cost sharing basis by CHAMPUS and the patient; detailed information is provided on the reverse of DA Form 1863-2 regarding patient and CHAMPUS liabilities. If the physician wishes to accept assignment of CHAMPUS benefits, and so certifies by signing item 20 of DA Form 1863-2, the sum of the patient's liability and the CHAMPUS payment will constitute payment in full for the authorized services billed on that form.



OCULAR EXAMINATION, BASIS AND TECHNIQUE: by Arthur H. Keeney, M.D., D.Sc.; published by The C. V. Mosby Co., St. Louis, 1970; 272 pages; price $15.75.

This is a well-written small volume concerning primarily the various techniques and instruments used in examination of the eyes. Coverage ranges from the simplest observation methods to use of the most refined and complex techniques available in ophthalmology today, including fluorescein angiography, electroretinography, ultrasonography, and electromyography. Diagnosis of the most important primary ocular disease entities, as well as ocular manifestations of systemic disease, are covered in some detail. The section on the pupil is particularly complete, and is useful for reference purposes.

In general, this book is highly recommended for reading by beginning residents in ophthalmology and as a refresher course for ophthalmologists, but would be of limited value to other medical practitioners.

ROBERT J. KAISER, M.D.

MANIC DEPRESSIVE ILLNESS: by George Winokur, M.D., Paula J. Clayton, M.D., and Theodore Reich, B.Sc., M.D., C.M.; published by The C. V. Mosby Company, St. Louis, 1969; 186 pages; price $6.50.

This book is a very necessary and timely addition to our present knowledge concerning the natural course of mood disorders. It is timely, not only because of its subject matter, but also because of its method of presentation. Many authorities are questioning the use of the "medical model" in psychiatry. The authors face this issue very clearly in their preface when they state, "The classic position in psychiatry has its roots in medicine." They continue by demonstrating the use of the scientific method in their study of manic depressive illness.

The book is divided into three essential sections. The first deals with a comprehensive review of previous studies by many authors on the subject of manic depressive disease. In the second they present in detail their own clinical and genetic studies of this illness. The third part covers possible etiologies and a review of current therapies.

The book describes and documents an extensive clinical study of manic depressive patients and their families. The question of etiology is considered from genetic, biologic, psychologic, and social approaches. An appendix gives even greater details of 61 cases studied in depth, plus a report of 167 interviews with relatives.

In this manner the researchers have offered a set of clinical and genetic findings that are fundamental to the understanding of this illness. The authors believe that subsequent studies should build on these foundations.

The section on treatment is relatively brief, but it is well supplied with an excellent bibliography. The use of lithium carbonate (the most specific agent available for treating the manic phase) is described in limited detail. This was, no doubt, due to the fact that the drug at the time of writing was still considered by the Food and Drug Administration to be experimental. It has since been made available for clinical use.

This book is highly recommended for psychiatric resident training, for research clinicians, and for the practicing psychiatrist.

ROBERT J. LEHMAN, M.D.

DAVIDSON'S COMPLEAT PEDIATRICIAN (Ninth Edition): by Jay M. Arena, M.D.; published by Lea and Febiger, Philadelphia, 1969; 792 pages; price $19.50.

This Ninth Edition of the *Compleat Pediatrician* is no longer a satchel book. The fact that this text has survived for a half-century attests to its widespread use and applicability. The 792 pages; seven figures; 58 tables (although all not labeled), including one Table 11-3 Drug Dosages; 93 pages; and even the back cover of the book, used for a growth and development scale; shows little wasted space for available information. The chapter on poisoning, with its blue pages, signals an area where this book will find special and great general use.

Although the information presented in the 12 chapters does not follow the conventional form of many texts, the approach to disease, by first discussion of symptoms and signs, differential diagnosis, and then laboratory studies, with suggestions for therapeutic approaches, may help this book become the first-line reference pediatric text for the busy practioner.

The shortcomings, although the book was not supposed to include everything, are chiefly brevity in the discussion of diseases and explanation for their underlying pathophysiology.

This book will also be translated into many foreign languages, for it will serve best the doctor who is on the firing line of practice, and provide something which will work right now! For the student, it may serve as a primer in the approach to problems of the young infant and child. To the specialist in pediatrics, only as a quick reference book.

My own pediatric career began as a medical student reading for typographical and grammatical errors in the *Compleat Pediatrician*. Memories of the original author and teacher, I honor and hold most dear; the contributors, with great respect. We all welcome the continuance of the *Compleat Pediatrician*.

B. F. ANDREWS, M.D.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 4-69. This 30-year old single, black gravida 7, para 6, had an EDC in March, 1969. She was initially seen with this pregnancy on October 7, 1968; her hemoglobin was 11.0 grams, weight 228 pounds, VDRL non-reactive, blood pressure 120/70, urinalysis—negative.

She was admitted to the hospital from the outpatient department at 12:55 p.m., on January 10, 1969, with symptoms of "flu." When she saw her physician earlier, she seemed unsteady on her feet. She had fallen and burned her right buttock. After sedation with Demerol and Scopalamine she became unresponsive, with dilated pupils. Examination revealed rapid deep respirations of 48 per minute, blood pressure 160/80, pulse 100 per minute. She was unresponsive to verbal stimuli. There was slight light reaction bilaterally; her discs were flat, no hemorrhage or venous engorgement. Scleras were distinctly ecteric. Her face was symmetrical with fetid breath. Her urine was dark. She drew up her upper arm in flexion when she had a uterine contraction. The cervix was two cm dilated.

A lumbar puncture was performed with considerable difficulty. Opening pressure was 80-90; closing pressure was 60-70. The fluid was slightly yellow and was sent to laboratory for cells, protein, pandy, sugar, and serology. The impression was liver dysfunction; the Demerol and Scopalamine may have potentiated present condition. They too rule out an intracranial lesion, especially posterior fossa and sickle cell disease.

A Foley catheter was inserted and urine output measured. Her membranes ruptured spontaneously at 1:30 a.m. She delivered without anesthesia, a frank breech at 2:10 a.m. on the 11th. Blood loss was estimated 200 cc. She was maintained on IV fluids. The impression was hepatic coma.

Some additional information was obtained from the patient's mother: the patient had complained of blurred vision and dyspnea three days before admission. She had a cough and later complained of sore throat and headache. She received a shot for the "flu" from the physician yesterday. The patient had no difficulty with previous pregnancies. The infants tended to be large, weighed eight pounds, all survived. The patient had marked edema of her lower extremities this past week. There was no history of drinking or smoking. Her mother commented on her unsavory friends.

The results of some laboratory tests: blood ammonia 60, BUN 21, blood sugar 71 č glucose running. She had a reversal of A/G ratio T.P. 5.7; Alb 2.5/ALB 3.2, Na 133, K 4.6, cl 105, co_2 20 SGOT 252; SGPT 106; LDH 2070.

Her condition worsened; she required a tracheostomy, which was performed under local.

Her urinary output decreased and she had some bleeding from the nasotube. A 24-hour urine specimen was sent to the University of Kentucky for toxicology (carbon tetrachloride organic solvents, methyl alcohol).

Suddenly at 12:30 a.m. on the 16th she gasped for breath while the tracheal tube was being adjusted, and ceased breathing. An attempt was made to artificially ventilate her. Her pupils were fixed and dilated. She had no pulse or blood pressure, and was pronounced dead.

An autopsy was performed. Less than five mg percent of salicylate was detected in the urine, no barbiturate, methyl alcohol, or carbon tetrachloride. The final diagnosis was acute central necrosis of the liver, severe. Marked tubular necrosis of the kidneys. Mild biliary nephrosis. Moderate congestion of the lungs, liver, spleen and kidneys. Early bronchopneumonia, plus focal areas of atelectasis and intraloveolar hemorrhages of the lungs. Small focal subendocardial and epicardial hemorrhage of the heart, plus mild myocardial edema. The respiratory failure was secondary to the escape of the endotracheal tube from the tracheostomy stoma.

The pathologist made the following comment:

> This represented severe liver failure with central necrosis. This may have been complicated by pregnancy, but the other changes were secondary to liver failure. On a purely histological and gross anatomical basis, the etiology of this liver necrosis cannot be determined. There are cases of severe necrosis secondary to viral hepatitis without significant inflammatory reaction. This cannot be determined from necrosis secondary to toxic hepatitis. The tubular necrosis of the kidneys was somewhat suggestive of a toxic etiology of the liver damage, but could have been attributed to a terminal ischemia and to the bile nephrosis. Although toxicological tests showed no carbon tetrachloride or methyl alcohol in the serum, this doesn't rule out poisoning secondary to one of a great number of other toxic agents which could have been ingested; and tests for all of these would have been impossible.
>
> It was felt this represented an acute necrosis of liver secondary to ingestion of some toxic material that also leads to tubular necrosis in the kidneys and other changes. The possibility that this was a fulminating viral hepatitis, made more severe by pregnancy, cannot be ruled out.

Comments

The Committee classified this as an indirect obstetrical death with no preventable factors on the part of the physicians. The Committee felt that when the patient presented herself for care she was properly managed. The autopsy was quite complete and there was agreement with that reached by the pathologist in his fine discussion. It was again commented and emphasized by the Committee that tubal ligation perperformed after her 3rd or 4th child might have prevented this maternal death. The pregnancy occuring with liver disease can, in certain cases, aggravate such pathology.

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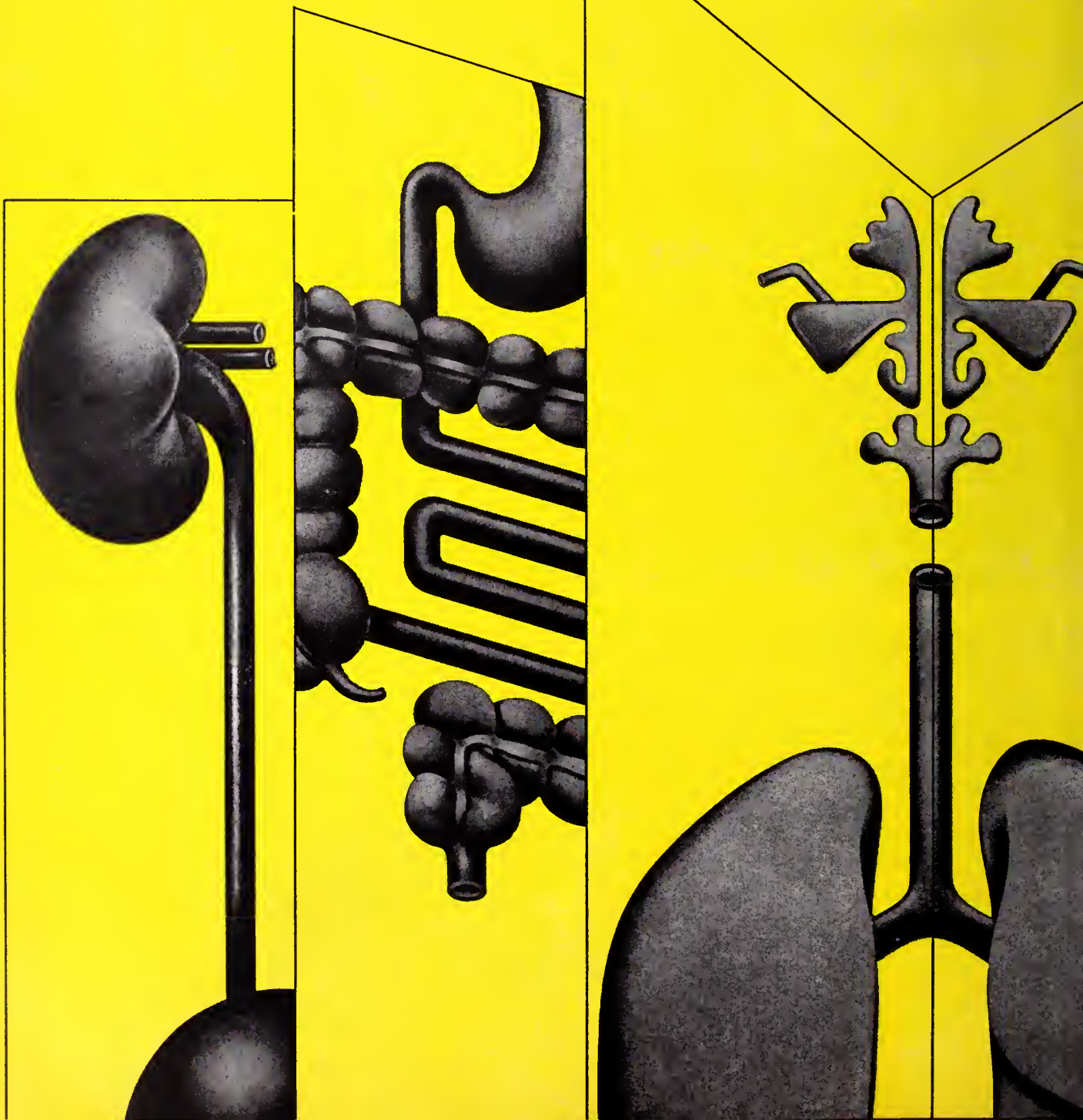
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Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary during prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a minimum of 4 months.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.

Usual Adult Dose: One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

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Brief Summary

Indications

Erythrocin is indicated against gram-positive cocci — staphylococci (most strains), pneumococci and streptococci (including enterococci). Active against other pathogens, such as *Corynebacterium, Hemophilus, Clostridium, Neisseria,* and *Treponema pallidum,* the agents causing trachoma and lymphogranuloma venereum and primary atypical pneumonia caused by *Mycoplasma pneumoniae* (Eaton agent). Establish susceptibility of pathogenic organism when practical. Maintain therapeutic levels for ten days in the treatment of streptococcal infections to help prevent rheumatic fever and glomerulonephritis. Also consider local measures or surgery whenever indicated.

Contraindications

Known hypersensitivity to erythromycin. I.M. preparation also contraindicated in patients hypersensitive to the "caine" type of local anesthetics.

Precautions, Side Effects

Occasionally abdominal discomfort, cramping, nausea or vomiting may occur; generally controlled by reduction of dosage. Mild allergic reactions, such as urticaria and other skin rashes, may occur. Serious allergic reactions have been extremely infrequent; if hypersensitivity is encountered consider appropriate countermeasures, e. g., epinephrine, steroids, etc., and withdraw drug. The rare possibility of overgrowth of nonsusceptible organisms should be kept in mind; if it occurs withdraw drug and institute appropriate treatment. Local venous discomfort, generally mild, may occur with I. V. administration. I.M. preparation is suitable for deep intramuscular administration only; restrict use in children with small muscle mass. A mild transient local discomfort sometimes occurs following rectal insertion of Erythrocin Suppositories; discontinue if significant discomfort persists.

Administration and Dosage

I. ORAL: In adults with mild to moderate infections caused by readily-susceptible organisms 1.0 Gm. daily; more severe infections or those caused by less susceptible organisms 2.0 Grams daily; unusually severe infections up to 4 or more Gm./day. Daily dose in children is 15 to 25 mg./lb./day depending upon severity of infection. Daily dose should be administered in divided doses at 4-to-6 hour intervals. Continue treatment for at least 48 hours after symptoms have subsided and temperature has returned to normal. In fulminating or life-threatening infections, a parenteral form of erythromycin is preferred.

II. PARENTERAL: Intravenous administration may be continuous or intermittent (6 to 8 hour intervals); 1 to 4 Gm. daily in adults; 15 to 25 mg./lb./day in children, depending upon severity of infection. Recommended I.M. dose is 100 mg. (2 ml.) for adults, 50 mg. (1 ml.) for children 30 lbs. or more and 1.4 to 1.8 mg./lb. in smaller children. Injections are usually given at 6 to 8 hour intervals; may be given at 4 to 6 hour intervals for severe infections.

III. RECTAL: Following therapeutic doses are recommended in children: to 20 lbs., 1-125 mg. suppository every 8 hours; 20 to 40 lbs., 1-125 mg. suppository every 6 hours.

Change to oral therapy as soon as practicable.

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NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.

Contraindications: Known hypersensitivity. Should not be given concomitantly with or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor. Then initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.
Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with narrow-angle glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.
Precautions: When used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase, and paranoid delusions, with or without associated hostility, may be exaggerated; in any of these circumstances, it may be advisable to reduce the dose of amitriptyline HCl, or to use a major tranquilizing drug, such as perphenazine, concurrently.
When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.
Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered.
Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.
How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-cc vials containing per cc: 10 mg amitriptyline HCl, 44 mg dextrose, and 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives.
For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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Electrodiagnostic Techniques in Ophthalmology†

THEODORE LAWWILL, M.D.*

Louisville, Kentucky

Newer techniques of diagnosis in ophthalmology, their applications and their future in the clinic and in research are discussed.

ELECTRICAL potentials associated with visual function have been known for over one hundred years. After 1950, the study of these potentials to obtain clinical information became feasible with the rapid advances in electronic equipment and techniques. Karpe,[1] Burian,[2] Jacobsen,[3] and others have studied and popularized these techniques in diagnosis as well as in research in visual science.

The three most useful electrodiagnostic tests in ophthalmology are the electrooculogram (EOG), the electroretinogram (ERG), and the visual evoked response or scalp potential (VER).

EOG: The electrooculogram is an indirect measure of the standing (constant) potential of the eye. This potential is generated in the area of the pigment epithelium of the retina (Fig. 1). Bruch's membrane (the division between retina and choroid) provides the insulator for this biological battery. The amplitude of this potential varies with the state of light adaptation in the normal eye, and the relative amplitude between the dark-and light-adapted states reflects the functional integrity of the pigment epithelium.

The pigment epithelium of the retina is directly involved in the metabolic cycle of visual pigment. This epithelial layer, in which the receptor outer segments are embedded, metabolically supports the rods and cones.

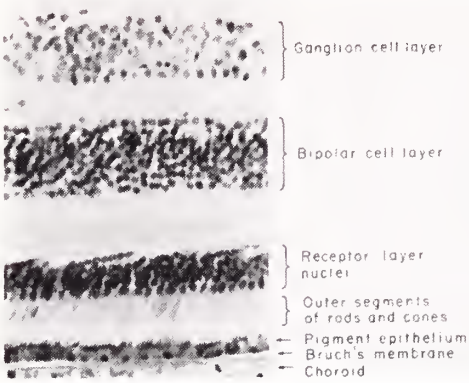


FIGURE 1 Section of the human retina. The EOG reflects the function of the area of the pigment epithelium. The ERG reflects separately the function of the receptor and bipolar layers. The VER is transmitted to the occipital cortex through the ganglion cell layer.

The pigment epithelial layer accumulates the common retinotoxic drugs, chloroquine and phenothiazine. Toxic effects of these drugs appear to be an interference with the metabolic activity of the receptor cell-pigment epithelial complex which leads to destruction of the rods and cones themselves.

The electrooculogram often becomes abnormal before clinical signs of ocular toxicity from these drugs. Lawwill, et al.[4] have shown

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FIGURE 2 EOG electrodes are placed at the inner and outer canthi for recording indirectly the standing potential of the eye during eye movements.

that the pigment epithelium accumulates very high levels of chloroquine, and that this drug is retained for many years. These levels are many times that found in other tissue. Ocular toxicity of chloroquine phosphate usually occurs after the patient has received at least 100 grams total accumulated dose and has taken the drug for at least a year. The EOG is one of the battery of tests used to detect the onset of drug induced retinopathy and is used to follow patients taking chloroquine. The EOG is also useful diagnostically

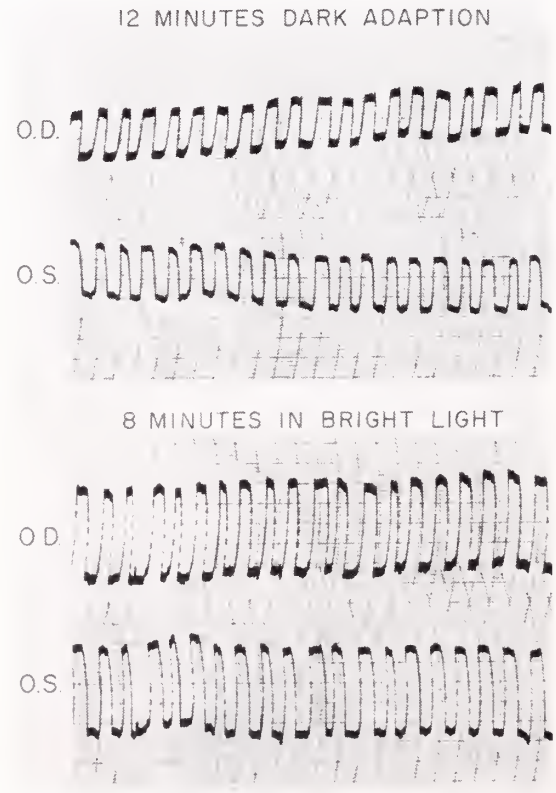


FIGURE 3 EOG record for light- and dark-adapted states. The electrical deflections reflect a repeated eye movement of 15 degrees.

in some cases of hereditary degenerative diseases of the eye. The EOG can be used under certain conditions to detect and quantify eye movements, i. e. nystagmus during caloric testing of the vestibular apparatus.

The EOG is recorded from electrodes placed on the skin at the inner and outer canthus of each eye (Fig. 2). In order to measure the relative standing potential of the eye, the patient is asked to look back and forth between two fixation points which causes the eye to rotate through a known angle. This causes the potential sampled by the two electrodes to change, and this change is recorded on a paper chart (Fig. 3). When the angle is known, the relative potential is measured. When the relative potential for a known angle has been measured, other eye movements can be calculated from the potential.

In studying the "light-rise" of the EOG, the relative potential for a known angle is measured first in the dark-adapted and then the highly light-adapted state. The potential in the light-adapted state should be at least twice that in the dark-adapted state.

ERG: The electroretinogram represents the rapid electrical response recorded from the eye when there is a sudden change in illumination. This response is recorded from a corneal contact lens electrode (Fig. 4). The signal is amplified and recorded on an ink writer or storage oscilloscope. The method is very similar to electrocardiography, though the electrical signals involved are much smaller than in electrocardiography. The light flash is usually supplied by an electronic photoflash system.

The ERG is produced by the mass response of the receptor cells and bipolar cells and reflects the overall integrity of these outer layers of the retina. The typical electroretinogram (Fig. 5) has an initial negative deflection (a-wave) and a following positive response (b-wave). The a-wave is associated more with the receptor cells and the b-wave more with the bipolar layer. Diseases which

compromise the flow in the central retinal artery are detected by a differential loss of the b-wave. Diseases which affect the receptor layer decrease the entire response. Early effects of retinotoxic drugs can be detected by the ERG as well as by the EOG. Some cases are detected first by the EOG and some by the ERG; therefore, they are usually both performed. The ERG is most useful in separating the hereditary and acquired retinopathies and for the differential diagnosis between progressive and non-progressive heredofamilial degenerations with night blindness.

VER: The visual evoked response is now mainly a research tool, but is useful in some

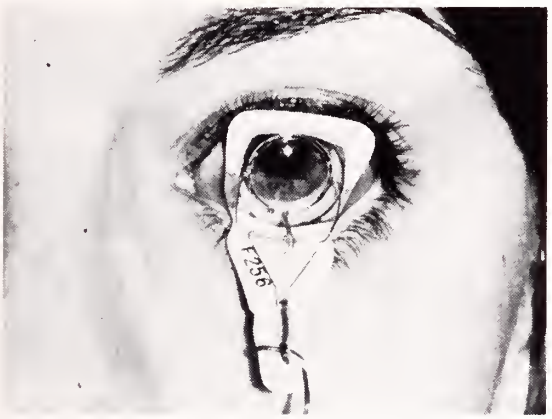


FIGURE 4 ERG electrode in place. The electrical potential is sampled at the cornea by the metalic ring surrounding the central contact lens. The silvered speculum holds the eye open and serves as the second electrode.

cases of questionable optic nerve atrophy or cerebral atrophy to detect the presence or absence of a cortical response to a visual stimulus. The response is measured from scalp electrodes similar to the usual clinical electroencephalogram except that the signal is processed by a computer to detect the portion of the record which is due to the visual stimulus. The amplitude and latency of these very small (2-15 microvolts) signals are dependent upon factors of visual processing and alertness of the patient and can be used to determine visual acuity in a cooperative subject.

All of these tests can be done on an outpatient basis and take approximately 45 minutes to an hour and a half. In a few pediatric cases general anesthesia is necessary and, therefore, may necessitate inpatient care. The tests are done either sitting in a chair or lying supine on a bed. Topical anesthesia of

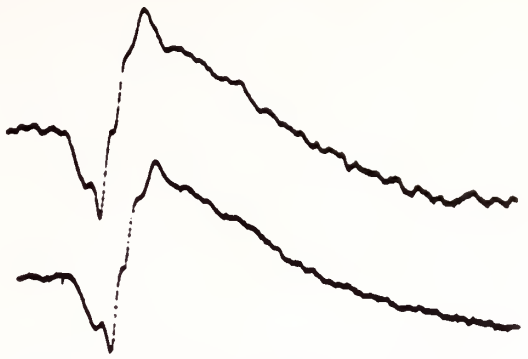


FIGURE 5 The typical human ERG. The amplitude is approximately 0.6 millivolts and the time 0.15 seconds.

the eye removes any pain from the procedure, though slight discomfort may be experienced due to the bright light.

These techniques are helpful as added diagnostic information, particularly in eye diseases in the pediatric age group, but they are not necessarily applicable to a high proportion of ocular cases.

Summary

Three electrodiagnostic tests in ophthalmology have been described: EOG, ERG, and VER.

The diagnostic applications of EOG and ERG are similar. These tests aid in diagnosis and separation of the pigmentary degenerations of the retina. They detect early retinopathy caused by chloroquine and the phenothiazines and they detect early damage from siderosis or chalcosis. The future for ERG includes the possibility of measuring the visual acuity objectively at the retina.

The VER is applicable in cases of questionable optic nerve or optic tract disease. It can detect the presence or absence of a visual signal at the cortex. In the future this test should provide the most accurate objective measure of visual function.

In most cases these tests can be done on an outpatient basis.

References

1. Karpe, G.: The basis of clinical electroretinography. *Acta Ophthal.*, Suppl. XXIV, p. 96, 1945.
2. Burian, H. M.: Electric responses of the human visual system *AMA Arch. of Ophth.* 51:509-524, April, 1954.
3. Jacobsen, Jerry: *Clinical Electroretinography.* Publisher, Charles C. Thomas, 1961.
4. Lawwill, T., Appleton, B., and Altstatt, L.: Chloroquine accumulation in human eyes. *Am. J. of Ophth* 65:530-532, April, 1968.

The Impact of Surgical Diseases on an Appalachian Community

J. David Richardson, M.D.,* F. Douglas Scutchfield, M.D.,** and Warren H. Proudfoot, M.D.***

Lexington, Kentucky

A two per cent random sample of Rowan County residents, done in May, 1970, illustrated that surgical diseases are a major cause of morbidity in the area. Other epidemiologic parameters of surgical disease are also discussed.

IN MAY, 1970, a two and five tenths per cent random sample of the residents of a Eastern Kentucky county was done. The survey attempted to determine the impact of surgical diseases on the community. Fifty-four per cent of the population had had some surgical procedure. Urban residents were operated upon more frequently than rural residents. Five and four tenths per cent of the population had been advised to have surgery, but had refused. Following the building of an acute general hospital in the community and the arrival of a general surgeon, the incidence of surgical procedures performed rose sharply.

A number of studies [1, 2] conducted in Rowan County, Kentucky, in the past few years have elucidated the community's major health problems, and have allowed formulation of a "community diagnosis."[3] In 1968, Welsh[3] outlined the top priorities for improvement of the community's health and called for further expansion of the community diagnosis. This study explores the impact of surgical diseases on the community health of this Appalachian county.

Community Setting

Rowan County is located in the Northeastern portion of Kentucky. It has a population of 14,000 with an additional 6,000 college students living in the community on a part-time basis. Morehead, with a population of 5,000, is the only urban area in the county. The economy of the county centers around the local university, with agriculture, mining, and timber providing most of the other employment. The educational level for the county is low (mean of eight and six tenths) despite the presence of centrally located secondary schools and a univeristy.

The medical care is provided by six general practitioners, two internists, and two surgeons. A 41 bed, fully accredited hospital has been serving the area since 1963. Before this, most surgery was performed in Lexington or Ashland, Kentucky, or Huntington, West Virginia —all are about 70 miles from Morehead.

Methods and Materials

In May, 1970, we conducted a random household survey of two and five tenths per cent of the county's population. This included 349 persons in 107 households. Household maps of the city and county were divided into one inch grids and numbered consecutively. Each household within the grids was numbered in the same fashion. The sample was then

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stratified according to population with two-thirds of the households in the rural area and one-third in the city. We obtained basic demographic data, such as age, sex, number of persons per household, occupation, and the means of financing hospitalization. All persons were asked to list any surgical procedures that had been performed on persons then living in the household. A surgical procedure was defined as any operation performed in any operating room under general, spinal, or regional anesthesia. Minot outpatient surgery and closed reduction of fractures were excluded. In addition, all persons were asked if any person in the household had refused recommended surgery, and the reason for refusal was determined.

TABLE 1

AGE DISTRIBUTION OF HOUSEHOLD HEADS

Age (Head of Household)	Rural #	Rural %	Urban #	Urban %	TOTAL #	TOTAL %
Below 20	1	1.4	1	2.6	2	1.9
20-29	7	10.1	3	7.9	10	9.3
30-39	11	15.9	4	10.5	15	14.0
40-49	12	17.4	7	18.4	19	17.7
50-59	11	15.9	9	23.7	20	18.7
60-69	13	18.8	7	18.4	20	18.7
70-79	13	18.8	7	18.4	20	18.7
80-89	1	1.4	0	0	1	0.9
TOTAL Households	69	100.0	38	100.0	107	100.0

RESULTS

General Characteristics of the Survey Population

The age distribution of the population studied is shown in Table 1. There was no difference in the age of the rural and urban household heads. There is a high concentration of household heads in the fifty-and-older age group in this county as a whole.

TABLE 2

OCCUPATION OF THE HOUSEHOLD HEADS

	Rural #	Rural %	Urban #	Urban %	TOTAL #	TOTAL %
Professional-Managerial	4	5.7	11	28.9	15	14.0
Skilled	18	26.1	7	18.4	25	23.4
Unskilled-Unemployed	47	68.1	20	52.6	67	62.6
TOTAL	69	99.9	38	99.9	107	100.0

Table 2 indicates the occupation of the household heads. The number of persons in the professional-managerial group is low (14 per cent); nearly two-thirds are unskilled or unemployed. The number of professional-managerial workers in the city is three times that of the rural area.

Three-fourths of those interviewed had some method of third-party payment for hospitalization (Table 3). Some households had more than one method of third-party payment, which makes the total greater than 100 per cent in urban residents. There was an inequality between the rural and urban households, with twice as many rural families having no means of financing hospitalization. Three urban families had hospital insurance for each one in the rural area of the community.

TABLE 3

METHOD OF HOSPITAL PAYMENT*

	Rural #	Rural %	Urban #	Urban %	TOTAL #	TOTAL %
None	22	31.9	6	15.8	28	26.2
Medicaid	7	10.1	2	5.3	9	8.4
Medicare	25	36.2	8	21.1	33	30.8
Insurance	20	18.7	25	64.1	45	42.1
TOTAL	74	107.2	41	107.8	115	107.4

*Totals are greater than 100 per cent because some households had more than one method of hospital payment.

TABLE 4

PREVALENCE OF SURGICAL PROCEDURES

Procedure	RURAL (230 persons)	URBAN (119 persons)	TOTAL (349 persons)	LOCAL PREVALENCE RATE (per 1,000)
Appendectomy	12	12	24	68.7
Tonsillectomy	7	16	23	65.9
Hysterectomy & Gynecologic	12	8	20	57.3
Cholecystectomy	13	6	19	54.3
Orthopedic Procedures	14	4	18	51.5
Hernia Repair	5	8	13	37.2
Urologic (Trans-urethral resection prostrate)	5	4	9	28.6
Ceaserean Section	3	4	7	22.9
Cancer Resection	4	3	7	22.9
Abdominal Procedures (excluding others)	2	5	7	22.9
Hemorrhoidectomy	4	2	6	16.9
Ulcer Operation	2	4	6	16.9
Vein Stripping	2	3	5	14.3
Thyroidectomy	4	1	5	14.3
Plastic Surgery (cosmetic)	1	3	4	11.4
Plastic Surgery (non-cosmetic)	1	1	2	5.7
Breast Surgery	2	2	4	11.4
Cancer Resection	2	1	3	8.5
Chest	2	0	2	5.7
Vascular	1	1	2	5.7
Neurosurgical	1	0	1	2.9
Other	1	1	2	5.7
TOTAL CASES & PER CENT OF PERSONS HAVING SURGERY	100 (43.4%)	89 (74.7%)	189 (54.1%)	

The Prevalence of Surgical Procedures

Table 4 indicates the prevalence of a history "of surgical procedures in the entire lifetime in this population." The most common operation performed was appendectomy; this is the fourth most common procedure performed nationally.[4] Tonsillectomy ranks second, with 65.9 cases per 1000 performed. The number of tonsillectomies performed in the urban area was over twice that of the rural area, despite the fact that only one-third of the total interviews were conducted in the city. Gynecologic surgery, primarily hysterectomies, was also quite common. There were 19 cholecystectomies performed in the 349 persons interviewed, for a prevalence rate of 54.3 cases per 1000. The number of hernia repairs was greater in the urban than rural area, with three pediatric herniorrhaphies performed in the city to one in the rural area. Thoracic, vascular, and neurologic surgical procedures were relatively uncommon. Table 5 indicates the operations performed most common nationally, compared with the ranking in Rowan County.

TABLE 5

MOST COMMONLY PERFORMED SURGICAL PROCEDURES NATIONALLY* AND RANKING IN ROWAN COUNTY

1. Gynecologic Surgery	(3)
2. Tonsillectomy & Adenoidectomy	(2)
3. Hernia Repair	(6)
4. Appendectomy	(1)
5. Eye Operations	—
6. Orthopedic Procedures	(5)
7. Cholecystectomy	(4)
8. Abdominal Operations	(10)
9. Cesearean Section	(8)
10. Ulcer Operation	(12)
11. Varicose Vein Stripping	(13)
12. Neurosurgical Procedures	(21)

*Based on interviews with 145,000 persons, 1959-60, by National Health Survey.

In the population sampled, five and eight-tenths per cent of those interviewed stated they had declined a surgical procedure which a physician had recommended (Table 6). There was no significant difference in the number of surgery refusals in the urban and rural populations. Most persons stated they feared the operation, and their fear prompted their refusal. Despite the lack of hospital

facilities and the relatively low per capita income, only two persons stated they refused surgery for these reasons. Personal and emotional factors seemed more important than economic consideration in the decision not to have a recommended operation.

Temporal Changes in Surgery Performed

The number of operations performed in this local hospital has increased steadily each year in the population surveyed, with more procedures performed there in the past two years than in all the previous six years of the hospital's existence. In addition, the number of cases done at other hospitals has also risen greatly to parallel the local increase (Table 7).

While more people are being operated on yearly nationwide, at least part of the impetus to have surgery performed seems to be because it is more widely accepted since the advent of the local hospital.

Discussion

Despite the recent emphasis on the effect of certain diseases on community health, little or no information is available on the importance of surgical diseases on various populations. The National Health Survey periodically determines the nationwide yearly incidence of surgical procedures, but no other studies on the subject have been published.

Gynecologic surgery, including hysterectomy and dilation and curettage, is the most common surgery performed nationally.[4] These procedures are also quite prevalent in Rowan County. Appendectomy is the most commonly performed operation in this community, while cholecystectomy is more common in Rowan County than in the country as a whole.

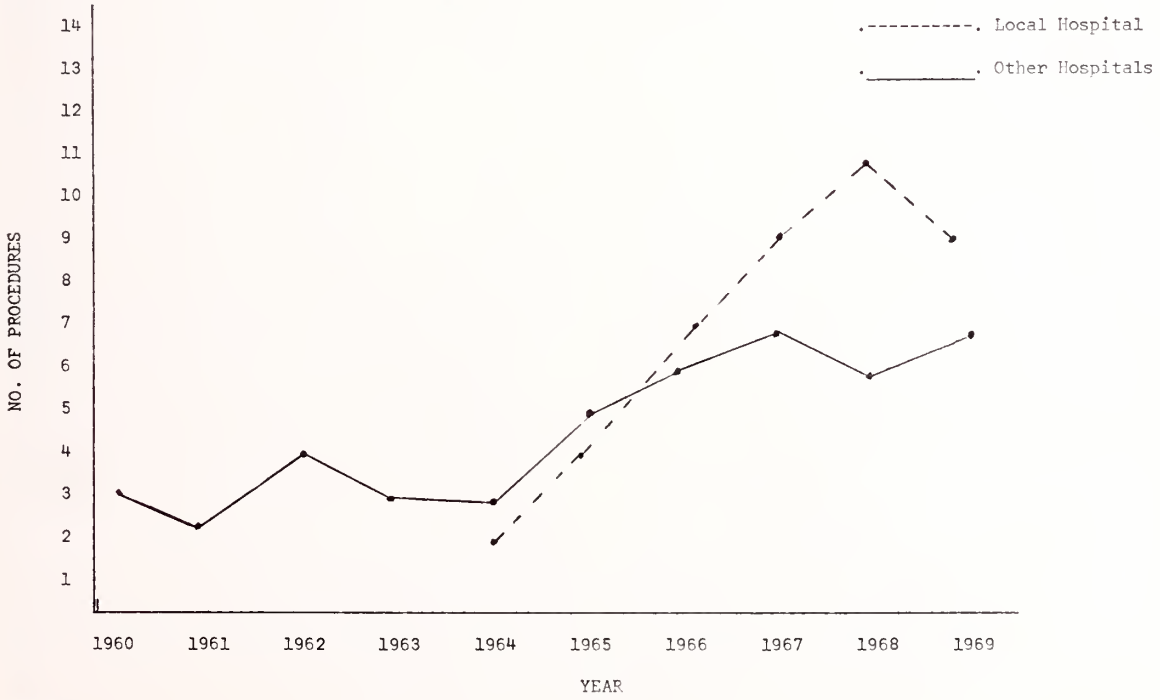
TABLE 6

REASONS FOR SURGERY REFUSAL

Stated Reason For Refusal	RURAL	URBAN	TOTAL
Fear of Operation	9	4	13
Lack of Facilities	1	0	1
Lack of Money	1	0	1
Inopportune Time	2	1	3
Other	1	1	2
NUMBER REFUSING SURGERY (Percent of population sampled)	14 (6.5%)	6 (4.2%)	20 (5.8%)

TABLE 7

YEARLY INCREASE IN SURGERY



The number of vascular, thoracic, or neurologic procedures was relatively low in our population, despite the high incidence of persons affected by lung and cardiovascular disease.[2,3] Even though these procedures are not common in any section of the country when compared to tonsillectomy and appendectomy, they seem less common in this community. One possible explanation is the lack of immediately available specialty services to treat such problems. Another example is the high incidence of ophthalmologic operations performed nationally[4] in comparison to only one in our population. However, surgical facilities for treatment of eye disorders are not readily available to residents of this county. General physicians are also unlikely to pursue a diagnostic problem in one of these areas, when they know that surgical treatment is not readily available.

This study also points out the inequality of surgical care rendered to the rural and urban populations. Using three elective surgical procedures—tonsillectomy, pediatric hernia repair, and cosmetic plastic surgery—as indicators of availability or willingness to seek and accept surgical treatment, it is evident that about six times more procedures are performed on urban than rural residents. For all surgical procedures, 74.7 per cent of urban residents were operated on, while only 43.4 per cent of rural residents had surgery. One could argue that urban residents have more problems requiring surgical treatment, but, other explanations are more likely. Tables 2 and 3 indicate that the urban residents are more often members of the professional-managerial or skilled labor groups and they are more likely to have a third-party payment of hospitalization. Other factors might be the easier accessibility of urban residents to the local hospital and main roads leading to other hospitals.

It is evident that surgical disease represents a major cause of morbidity for this community. Three-fourths of all persons in the city had surgery, while 54.1 per cent of the total population had a surgical procedure. While many of these procedures were elective and for benign conditions, many were major procedures causing significant morbidity and disability. In addition, another five and four-tenths per cent of the population sampled had been advised to have an operation, but refused surgery.

Acknowledgment

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References

1. Welsh, K. S., and Deushle, K. W.: Development of a community laboratory for medical teaching programs: A case study. *J. Med. Educ.* 43: 969-977, 1968.
2. Welsh, K. S.: Intensification of tuberculosis control through a community-wide approach. Rowan County, Kentucky. *Dis. Chest.* 52: 438-444, 1967.
3. Welsh, K. S.: Initiating community health development in an Appalachian county. *Am J. Public Health* 58: 1162-1172, 1968.
4. Hospitalizations. *U.S. National Health Survey,* Series B-7, Table 22, p. 27, 1958-1960.

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Hemorrhage
A Persistent Source of Obstetrical Emergency†

George C. Lewis, Jr., M.D.*

Philadelphia, Pennsylvania

Obstetrical blood loss remains a source of emergency problems for the physician. The diagnosis and present day treatment are discussed.

THE environs that encompass the obstetrical service in hospitals throughout the United States today tend to give the physician the sense of rather complete security. However, from time to time, complacency may be shaken by some form of catastrophe that results from hemorrhage, sepsis, or eclampsia. In spite of many years of progress, these pitfalls present critical challenges to the obstetrician. Difficult forceps procedures and desperate intrauterine manipulation have given way to less traumatic and much safer Caesarean Section. Prenatal care of large segments of the population has added largely to the safety of the long vigil from conception to delivery.

In the face of these and many other improvements, excessive blood loss, infections, and toxemia are still leading sources of maternal morbidity and mortality. Antibiotics have not removed septic shock from the list of dreaded complications. Antihypertensive agents, diuretics, tranquilizers, magnesium sulfate, and other approaches have not eliminated the everpresent threats of preeclampsia or eclampsia. The availability of blood substitutes, improvements in blood banking techniques, and a multitude of procedures for monitoring blood loss have not reduced the importance of hemorrhage as the leading cause of maternal death.[3] For this reason, in this presentation, attention will be focused upon obstetrical blood loss as a persistent source of emergency problems for the physician.

Introduction of a discussion on blood loss must be initiated by classification of the degree of hemorrhage considered in terms of its significance; since many physiologic, as well as pathologic aspects of obstetrics, are associated with a variety of bleeding patterns. In the last trimester of normal pregnancy, with the availability of an increased blood volume, a loss of up to 500 cc. of blood can be tolerated without undue stress upon the patient or the obstetrician. Expressed in another way, one can say that a significant blood loss in the third trimester would be 10 cc/Kg of body weight or more.

In 1967, Modan[6] and his associates studied a series of normal control subjects in the last trimester of pregnancy and women in the same trimester with moderate to severe blood loss. Their studies of blood volume changes indicated that a blood loss of 20 ml/Kg of body weight was serious and conducive to severe shock. In the same work, it was noted that the loss of 50 per cent of blood volume, about 40-50 ml/Kg of body weight, posed grave danger of renal failure and subsequent death. Remembering that the expanded blood volume in the last trimester may permit tolerance of larger volumes of blood loss, these figures of 10, 20, and 40 ml/Kg should be considered more than ample upper limits for bleeding problems in the first two trimesters.

It is apparent that there are a wide variety of basic problems which underlie the onset of

†*Presented at the general session of the 1970 KMA Annual Meeting, September 22, Louisville*

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TABLE I

SOURCES OF OBSTETRICAL HEMORRHAGE

FIRST TWO TRIMESTERS	THIRD TRIMESTER
Abortion	Placentation Problems
	Lacerations
Ectopic	Uterine Rupture
	Inertia
Trophoblastic Tumor	Uterine Inversion
	Caesarean Section
Traumatic and Chemical	Blood Dyscrasia

obstetrical hemorrhage (Table I). Situations listed present such a variable pattern that it is impossible to discuss the management of hemorrhage on an overall basis. It is better to consider individual situations as they apply to patients who have a bleeding problem.

Among the various causes listed in Table I, abortion may be considered the leading contender as the most frequent source of excessive blood loss. However, the true importance of abortion as a source of hemorrhage will probably never be clearly appreciated because of the lack of data relative to criminal abortions and their associated blood loss. Although listed separately in Table I, traumatic and chemical sources of obstetrical hemorrhage are usually associated with criminal abortion. The only maternal death at Hahnemann Medical College and Hospital associated with hemorrhage in the past two years fell into this combined category. In the last trimester of pregnancy, abruptio placenta is the most important source of blood loss that may be excessive.

In order to study the incidence of hemorrhage in a teaching hospital situation, the data from the Hahnemann Medical College and Hospital was reviewed for the two years, from July 1, 1968, to June 30, 1970, (Table II). In this two-year period of time, there were just over 2,700 admissions associated with termination of pregnancy. Seventy-five per cent of the deliveries took place on the ward service; ten per cent of the ward service was white. The ward patients were derived from a very low socio-economic population. Prematurity and perinatal losses are still excessive in this group. Under a Maternal and Infant Care Project, 60 per cent of the obstetrical patients on the ward service present some form of complication that fits the project definition. In spite of the problems presented by this group of patients, it is to be noted that the incidence of Caesarean Section is about five and four tenths per cent and that of breech delivery is about four and four tenths per cent. Both figures are not unusual. Table II also lists some of the factors that might be associated with hemorrhage in this population group. No first degree lacerations are included. It might be noted that most of the patients were multigravida, that about three-quarters of the patients had episiotomy, and that few patients had general anesthesia.

TABLE II

PARAMETERS RELATIVE TO OBSTETRICAL SERVICE
HAHNEMANN MEDICAL COLLEGE AND HOSPITAL
7-1-68 to 6-30-70
Deliveries: 2,421

Primagravid	916 —	Multigravida	1,505
Ward	1,785 —	Private	636
Caesarean Section	129 —	Breech	106
Episiotomy	1,788 —	Lacerations	250
Inductions	210 —	General Anesthesia	336

During the two-year period ending June 30, 1970, 271 patients who had complications in the first two trimesters of pregnancy and excessive blood loss were admitted (Table III). The patient with choriocarcinoma was noted to have a brain metastases shortly after she was admitted for hemorrhage. (Chemotherapy and radiation have controlled this patient's disease.) One abdominal pregnancy is included in the ectopic series. The death was associated with an attempted abortion in which apparently large amounts of potassium permanganate were placed in the cervix and upper vaginal vault. The patient, an 18 year old, primagravida, was admitted comatose in early pregnancy. There was substantial evidence of major blood loss, parametritis, peritonitis, and septic shock. Despite heroic efforts, the patient never regained consciousness. Death occurred eight days after admission. Approximately 25 per cent of the admissions for abortion demonstrated evidence

TABLE III

FIRST TWO TRIMESTERS
COMPLICATIONS WITH HEMORRHAGE

Abortion — 257	Ectopic — 13
Choriocarcinoma — 1	Deaths — 1

of an active septic process. Postabortal septic shock at the time of admission, or shortly after admission, was rarely encountered, being seen in only five patients in this series, including the one maternal death.

Douglas[2] in analyzing 50 septic abortions found serious blood loss in only six patients. It was apparent from his series that many factors other than blood loss combine to make evaluation of actual blood loss difficult or impossible. For the 257 patients with abortions noted in Table III, initiation of corrective procedures was prompt. It began in the Emergency Department, when large bore intravenous tubing was inserted at the time when blood samples were drawn for a cross match and a complete blood count. When clinical findings were suggestive of a serious blood loss, urinary catheter monitoring was carried out, as well as evaluation of central venous pressure. To this program there was added a variety of preparations, e.g. oxytocin, antibiotics, vasopressors, vasodilators, etc., as the clinical picture unfolded. When severe hemorrhage or sepsis was apparent, the patient was moved to an intensive care area. Residual placental fragments were removed within 24 hours; usually sooner if the patient's condition warranted it. Hysterectomy to control sepsis was not required or performed in this two-year series.

The ectopic pregnancies were not associated with any maternal loss; although, such emergencies are notorious for the amount of hidden blood loss that may be present. The classical patient presents no diagnostic problem. In the series of patients studied at Hahnemann, cul-de-sac aspiration was a routine procedure for the atypical case. Immediate surgical control of bleeding was a standard approach to the management of the ectopic patient.

Although, as illustrated in this series, trophoblastic tumors are rarely encountered, it is best to always have a high index suspicion for such neoplasia. Ultrasound scanning and radio immune assay techniques have added considerably to our diagnostic acumen. With the use of chemotherapy, possibly on a prophylactic basis, trophoblastic tumors as a source of serious blood loss should, in the future, be even more rarely encountered.

TABLE IV

COMPLICATIONS WITH HEMORRHAGE
THIRD TRIMESTER
ANTE AND INTRAPARTUM

TOTAL 82

Abruptio — 65 (19 severe)	Marginal Sinus — 3
Placenta Previa — 6	Other — 8 (6 from lacerations)

POSTPARTUM

TOTAL 35

FIRST 24 HRS. — 32

Atonic Uterus—18 Retained Placenta—11 Other—3

AFTER 24 HRS. — 3

Retained Secundines — 3

In the third trimester, blood loss may be classified into a combined antepartum-intrapartum group and a postpartum group. Sometimes clinical situations are not clearly able to be categorized in one or the other group; bleeding may extend throughout labor and into the puerperium. Table IV indicates the number of antepartum and intrapartum complications with hemorrhage occurring during the two-year study period. Nearly all the complications are related to placental problems. Those with minimal blood loss and minimal abruption were not included. The overall incidence of three per cent of bleeding with abruptio is very close to the figure of two per cent reported by DeValera[1] when he reviewed over 51,000 deliveries. He noted that 14 per cent of abruptio cases had severe bleeding. In our series, which was much smaller, 28 per cent of the abruptio patients were classed as very severe. In DeValera's series, there were two deaths from abruptio related to renal failure. DeValera emphasized that morbidity and mortality could be reduced if there was adequate blood replacement, as indicated by central venous pressure monitoring. To this we have added stimulation of labor by rupture of membranes and intravenous pitocin. Patients were also monitored for significant decreases in fibrinogen levels; when these occurred, prompt and vigorous replacement was instituted. Patients were also studied for evidence of systemic fibrinolysis. Two patients with such a picture responded to the use of very fresh blood for transfusion.

DeValera reported a one per cent incidence of placenta previa. In our own series

this constituted a three tenths per cent incidence. It is to be hoped that in the near future techniques such as radioisotope localization and ultrasound scanning may lead to the prediction of placenta previa before clinical evidence is otherwise available. Ultrasound has already proven to be useful in this respect at our own institution. Laceration and rupture of the uterus constituted a small portion of the sources of antepartum—intrapartum bleeding, especially when one considers that in Table II there were 250 lacerations recorded. Iatrogenic traumatic rupture and ruptured Caesarian Section scars constitute an avoidable source of serious hemorrhage in over half the patients with uterine rupture.[8] Sall[8] reported an incidence of one rupture in 1,310 deliveries. One-third of his series of ruptures were traumatic, one-third were spontaneous, and one-third were ruptures of uterine scars. Lacerations of the lower genital tract should not be associated with major blood loss, but frequently physicians misjudge the amount of blood loss. There also may be failure to carry out routine inspection and repair of all lacerations at the time of delivery. Prompt repair should lead to minimal blood loss. Traumatic operative procedures should be avoided through more liberal use of Caesarean Section.

In the postpartum group of hemorrhages, the atonic uterus and retained placenta played roles of almost equal importance (Table IV). Nearly every patient that was admitted to the obstetrical service had an intravenous infusion of five per cent glucose instituted through a catheter. Upon delivery of the placenta, oxytocin was added to the intravenous fluid, generally in the strength of 10-20 units per 1000 cc. of fluid. For the most part, hemorrhage associated with a relaxed uterus occurred when the intravenous infusion had not been utilized or the physician in charge at delivery failed to promptly add the oxytocic. Retained placenta should be a rare source of bleeding on a large scale. A partially separated retained placenta presents a frequent challenge to be resolved before bleeding can ensue. The procedure suggested by Greenhill[4] for gentle expulsion or a standard manual extraction, followed by the use of an oxytocic, usually results in prompt resolution of the difficulty.

In regard to third trimester blood loss problems in the two-year series, there were a total of 117 patients with hemorrhage that was considered significant. Of these, 44 had transfusion with two to ten units of blood. There were no maternal deaths. In this small series, we did not encounter placenta accreta or uterine inversion. Placenta accreta is a rare but serious source of hemorrhage. Luke[5] in describing 427 cases of placenta accreta noted that the maternal mortality varied between 20-60 per cent. His suggested therapy, with no reported mortality, was hysterectomy simply to remove the placenta. For uterine inversion the usual management is prompt recognition and then replacement of the uterus. Actually prevention is much to be preferred in this particular situation.

Tables II-IV present what has been encountered in a two-year period in one institution, but more appropriate to this discussion is the general management of blood loss problems when they are encountered despite all efforts at prevention. Table V provides some of the general principles that should govern the management of hemorrhage. Physicians, nurses, and other attendants tend to underestimate blood loss by as much as 50 per cent. The physician tends to convince himself that his patient hasn't lost much blood; he procrastinates and waits. The second phase of management is to act promptly. Initial action may be as simple as advising a patient over the telephone to get into the hospital. Certainly, in early pregnancy problems, diagnostic precedures and the first phases of therapy should be instituted in the Emergency Department before delay can become disastrous. An indwelling intravenous catheter is the best means of maintenance of an open passage for medication and blood. A minimum of two units of O Rh negative blood

TABLE V

PRINCIPLES GOVERNING MANAGEMENT OF HEMORRHAGE

1. Don't Underestimate
2. Act Promptly
3. Establish I.V. Pathway
4. Have Reserve Blood On Hand
5. Attack Primary Problem
6. Abdominal Approach When Indicated

should always be kept on hand in the blood bank if it is adjacent to the delivery floor; otherwise the blood should be kept in an ice-box on the delivery floor. For institutions handling a number of abortions each week blood should also be kept available in the Emergency Department refrigerator.

After the initial steps are instituted to correct blood deficits, the primary source of bleeding should be dealt with promptly. When there are obvious clinical indications of significant blood loss, a central venous pressure monitoring system should be established and utilized to pump adequate volumes of fluid into the patient. Supplemental procedures such as the use of vasopressors, vasodilators, cardiac stimulants, digitalis, corticosteroids, and other means of handling shock may be used, particularly for septic abortions. Pharmacologic means for restoring blood pressure usually lead to a temporary rise in values and a false sense of security. The best therapy for blood loss is blood replacement. When hemoglobin levels fall below 5 gm. per cent we have preferred to use packed cells instead of whole blood. Even with these measures, replacement may be inadequate despite apparently normal vital signs, central venous pressure, and urine output. Experience has indicated to us that serial hemoglobins and hematocrits every four hours occasionally point to the need for additional transfusion.

At times, all the procedures referred to may fail to stop serious blood loss. There are obvious situations for primary therapy by the abdominal route. Such problems as ectopic pregnancy, placenta previa, chronic uterine inversion, and rupture of the uterus, require a direct attack upon the bleeding source. For the patient of low parity with uterine inertia or a high rupture, hypogastric artery ligation or uterine artery ligation may be helpful in slowing blood loss to a tolerable level. The O'Leary's[7] have described ligation of the ascending branch of the uterine artery together with a portion of the adjacent uterine wall. However, if the broad ligament is involved or if the laceration is quite low, such a procedure may not be practical and a hysterectomy may be the only choice. In the two-year series described in this report such operative procedures as uterine or iliac ligation and hysterectomy were not required to control bleeding, since more conservative procedures proved effective.

Summary

Despite all the modern advances in obstetrical management, hemorrhage remains a major threat to the health and safety of the mother. A series of over 2,700 obstetrical admissions is presented to illustrate some of the problems encountered in blood loss. Abortion constituted the largest single source of excessive blood loss. The only maternal death occurred in a case of septic abortion with combined hemorrhage and sepsis. Prompt corrective action and several preventive measures that have been described, appear to be factors in keeping maternal morbidity and mortality from hemorrhage to a minimum.

References

1. deValera, E.: Abruptio Placenta. *Am. J. Obstet. & Gynec.* 100:599, 1968.
2. Douglas, G. W., and Bechman, E. M.: Clinical Management of Septic Abortion Complicated by Hypotension. *Amer. J. Obstet. & Gynec.*, 96:633, 1966.
3. Eastman, E. J., and Hellman, L. M.: *Williams Obstetrics*, 13th Ed., pp. 6-12. Meredith Publishing Co., New York, New York, 1966.
4. Greenhill, J. P.: *Yearbook of Obstetrics and Gynecology*. Yearbook Publishers, Chicago, Illinois, 1968, p. 229.
5. Luke, R. K., Sharpe, J. W., and Greene, R.R.: Placenta Accreta: Adherent or Invasive Placenta. *Am. J. Obstet. & Gynec.*, 95:660, 1966.
6. Modan, P., Kumar, S., and Misra, P.: Blood Volume in Accidental Hemorrhage. *J. Obst. & Gynec.*, India, No. 4, 17:343, 1967.
7. O'Leary, J. A., and O'Leary, J. L.: Uterine Artery Ligation for Control of Obstetric Hemorrhage. *Ob./Gyn. Digest*, 11:36, 1969.
8. Sall, S., Sherman, D. H., Weingold, A. B., and Stone, M. L.: Rupture of the Gravid Uterus, Changing Patterns in Etiology and Treatment. *Pacific Med. Surg.*, 75:333, 1967.

SPECIAL ARTICLES

Professional Ideals

A Report of the AMA Judicial Council Adopted by the House of Delegates, December 1, 1970

The following report entitled "Professional Ideals" was adopted by the AMA House of Delegates at the 1970 Clinical Meeting in Boston this past December. The Journal editors felt it would be of enough interest to the members of KMA to print the full content of the report.

John C. Quertermous, M.D., KMA President, refers to the report on his "President's Page" on page 77 of this issue of The Journal.

RECENTLY many letters have been received by the Judicial Council complaining of an apparent preoccupation by an increasing number of physicians with the financial aspects of their medical practice.

The Judicial Council reaffirms that the laborer is worthy of his hire and the physician is entitled to reasonable compensation for the service he performs. At the same time, the Council must point out that the "prime object of the medical profession is to serve humanity; reward or financial gain is a subordinate consideration."

In 1934 the House of Delegates said "one of the strongest holds of the profession on public approbation and support has been the age old professional ideal of medical service to all, whether able to pay or not." The Council believes it would be helpful if the House were to reaffirm that policy at this meeting.

Some physicians seem to believe that the practices of business enterprises should be utilized by physicians in order to "encourage prompt attention to medical accounts." They ask, "Why shouldn't we be paid as soon as the dry goods store, the grocer, or the TV service man?"

Ideally, the physician should be paid promptly. If the physician is not paid as promptly as other creditors he should recall that he is a professional man with all the perquisites that that term implies. Our patients in large number carry insurance to cover the cost of medical services. (They do not insure payment of the cost of other professional or business services to any notable extent.) Governmental programs have been instituted and are being developed continually to provide payment for medical care to those who are unable to provide this payment.

If the profession were to cast aside its ideals and traditions and adopt the practices of business, trade, or industry in dealing with patients, then the profession would be casting aside also the perquisites that have been accorded it. The increase of collections by adding 1½ per cent interest per month to a bill of an honest patient embarrassed because of inflationary trends, or the bill of some retired person living on a small pension is, in the opinion of the Judicial Council, not justifiable. It simply is not worth it from any point of view. The imposition of a penalty on the bill of a "deadbeat" is not likely to cause him suddenly to change; the chances are he will become even less likely to pay.

A physician who demands a satisfactory credit report on an individual before accepting that individual as a patient is demonstrating that to him financial compensation is the prime object and reward of his profession.

A physician who publicly refuses to see a patient, who has an appointment, because the patient's balance on account is "too high" is demonstrating that he respects neither himself nor his profession.

These examples are real. The Council believes they are the exception, and they seem more conspicious because of that fact. Nonetheless, these practices reflect adversely on the whole profession and especially on the countless physicians who extend credit willingly or write off old accounts because they are dedicated to serving mankind.

The Judicial Council therefore recommends that the House of Delegates reaffirm that the prime object of the medical profession is to render service to humanity; financial gain is a subordinate consideration.

The Council recommends that the House call this reaffirmation of policy to the attention of constituent and component medical societies, asking them to urge all physicians to adhere faithfully to the professional ideals, traditions, and goals of American medicine.

Health Careers in Kentucky: A Progress Report

by Robert C. Wheeler*

FOR the past two and one-half years, Health Careers In Kentucky (HCIK) has taken dynamic and agressive actions in the area of health manpower.

This program was an outgrowth of the Kentucky Allied Medical Council, which is composed of the Kentucky Medical Association (KMA), Kentucky Hospital Association (KHA), Kentucky Dental Association (KDA), Kentucky Pharmaceutical Association (K.Ph.A.) and the Kentucky Nurses Association (KNA).

Planning for the establishment of HCIK began in the fall of 1967, with a major impetus coming from the executives comprising the Allied Medical Council, along with the members of the Council's Health Careers Committee, which was composed of: Mrs. Hoyt Gardner, A. G. Dierks, Ruth Cole, William N. Fields, M.D., Earl P. Slone, and Mrs. Marjorie Glaser. At this time, a need was documented for over 3,000 allied health personnel within the state. Since all health related disciplines were concerned about this critical shortage, an Advisory Council to HCIK was established to advise and provide a liaison for the basic program. Joseph Hamburg, M.D., was the first Advisory Council Chairman.

HCIK's success has been a result of the interest and active participation of the Advisory Council member allied health associations, such as the Kentucky Medical Association, the Woman's Auxiliary to the Kentucky Medical Association, and the Kentucky State Association of Medical Assistants. Presently, the member associations sponsoring the Health Careers In Kentucky program have grown from 18 original members to 34 of the health related organizations within Kentucky.

From its beginning until June of 1969, the staff was provided for HCIK operations on a part-time basis by the Kentucky Hospital Association. During this time, the philosophy of HCIK was established. As a non-profit, voluntary, statewide organization, HCIK will deliver free services in three critical areas of health manpower: recruitment, education and utilization.

It was also during this period that the parent body of HCIK, the Kentucky Hospital Research and Education Foundation, became incorporated and received a tax exempt or 501(c)3 status. Office space was provided HCIK by the KHA. Interest and a proven need for the services of Health Careers In Kentucky enabled it to grow in size as well as budget. A full-time staff of two, plus a part-time secretary, is now with the program. Its budget has grown from $14,000, contributed by the KHA to begin the first year of operation, to $33,500 for the 1970-71 year. This increase is due to voluntary dues payments from the member voluntary allied health associations, that were above the minimum required dues, plus a voted increase in dues payments by the membership of the Kentucky Hospital Association.

Certain projects were established and became basic to the long-range success of HCIK. A literature library was developed which now includes 27 individual pamphlets and flyers for various health occupations, describing the career itself, training involved, and where to write for additional information. A reply card system was established and placed in each Kentucky high school, college, and hospital, to give interested persons a means whereby they could request this literature. In 1969-70, HCIK answered 5,400 requests with 18,215 individual pieces of literature. The name and address of each person requesting literature from HCIK is placed on a computer printout sheet and sent to every institution offering training

(Continued on next page)

Program Coordinator, Health Careers in Kentucky

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in the career(s) for which the person requests literature. Several allied health curriculums used this service to fill classes that were empty the previous year.

Volunteer health professionals and advisory council representatives were utilized to show a slide presentation depicting the health careers offered in Kentucky in 66 high schools, before approximately 10,000 students. In 1970-71, a new program was developed to help create enthusiasm among students for a career in health and to show them, as well, the great number of opportunities for employment in the health field. Approximately 16,000 students in 35 Kentucky high schools have seen the new program.

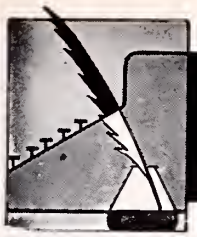
Working with the educational sector of the health field, HCIK developed the first complete inventory of allied health curriculums taught within Kentucky in the *Health Careers In Kentucky Guide.* Every junior and senior high school counselor in the state received a free copy of this *Guide;* also, each director of an allied health curriculum received a copy.

Over 550 persons have attended seven guidance counselor workshops in the past two years.

Surveys were conducted by HCIK, and the manpower data was used for recommendations and advisement to educational units in health education programming.

This year, with the increased interest and participation of the HCIK members, several new projects were established. Radio and television spot announcements about health careers were developed to inform the general public about the health manpower needs and opportunities. HCIK participated and consulted in several health careers fairs which were sponsored by medical auxiliaries. A special slide presentation explaining Health Careers In Kentucky was produced for these fairs.

What are the plans for the future? The HCIK staff plans to involve the educational sector even more in the HCIK philosophy by holding educational conferences and recruitment workshops. Kentucky is still far from solving the health manpower crisis, but with continued interest and participation of the allied health organizations within the state, HCIK should be instrumental in helping to alleviate the present shortage of health personnel.



EDITORIALS



The Time Is Not Ripe

IT APPEARS that this year will feature a renewed effort in our Congress to enact some sort of a comprehensive federal health plan more inclusive than any we have yet known in this country. There are already in process half a dozen or more diverse approaches. It is too early now to judge the comparative merits of these various plans, because they have not been clearly defined. In an attempt to acquaint us, as well as possible, with the character of these measures, Blue Cross-Blue Shield prepared a summary; and this has been widely distributed by the Kentucky Chamber of Commerce. This is a really valuable service, but provides, as of now, only the barest basis for understanding what may be proposed.

An editorial in the *Louisville Times* of January 5 states: "the shape the administration proposals will take is not yet clear. There will not be an effort by Mr. Nixon to establish a system of national health insurance. Instead, the administration will lean toward initiatives aimed at reforming the medical care system, according to Doctor Edward E. David, Jr., the President's Science Adviser." Just what is meant by this statement is far from clear.

It is generally believed by both consumers and providers of health care that Medicaid and Medicare, initiated during the past ten years, have not been very successful in covering the medical needs of the indigent and of the aged for which they were designed. The causes for their poor performance have been many and varied—poorly planned, ineffectively administered, over used and abused, multiplicity of agencies involved. To any reasonably minded person it would seem more practical to first improve the efficiency and lower the cost of operation of these programs before expanding to a total, all-inclusive, program of medical care in which the problems of health care and cost may be multiplied beyond any probability of control. But it appears that a practical program is not what is desired by some of our legislators.

Morris Fishbein, M.D., Chicago, in an editorial in January 1 issue of *Medical World News*, sketches briefly the steps in the evolution of national health care programs since 1913. He notes that, "the passing years have witnessed tremendous growth in the numbers of salaried full-time physicians. The emergency rooms of hospitals have become out-patient departments. University medical schools have established immense teaching and research hospitals, and these carry a large proportion of the medical care load. Changes such as these have stimulated the current interest in trying to develop some sort of national plan for the individual patient . . . the race for national health insurance legislation is on. The Administration, Congress, and the insurance industry are involved in feverish preparation of plans that would meet the public's needs and accommodate their own interests at the same time. The question remains as to what group will occupy the director's chair when the huge enterprise of national health insurance takes shape. Politically alert M.D.'s must consider this a warning."

The Times editorial further contains these statements: "Meanwhile the costs have soared. Total outlays have almost doubled in the past five years. Doctor's fees rose almost twice as fast as the general cost of living. The biggest

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boost has come since the advent of Medicare, which allows both doctors and hospitals to charge on a loose 'reasonable and customary' fee basis. It is these rising costs up and down the line that have been the major cause of the increased spending for medical care, rather than an expansion of service. Clearly, efficiencies and controls cannot be placed on the consumers of a system that now operates more for the convenience of its practitioners than according to the needs of the sick." Most physicians are bound to feel that this appraisal is not factual, since the average physician or surgeon has worked more hours and harder under Medicaid and Medicare than before, with no commensurate increase in income.

It would appear that the more comprehensive and radical of the proposals outlined in the material here cited greatly favor institutional and group practice over the private physician. As noted by the description of administration, "No provision for use of the private sector; group practice receives payment priority plus costs for allied health personnel; fee —for—service providers paid last." Fortunately this description is not stated in most of the plans.

The outlook, however, is not so gloomy as one might be led to believe. Some well-informed observers have predicted that the time has not arrived for National Federally Controlled Universal Health Service to be adopted. The political climate this year is not favorable. That some expanded or even improved forms of health legislation will be enacted this year we must expect—but certainly not the most radical. Fortunately the Administration's plan is tempered with some conservatism, and in its formulation the private insurance industry is participating. Further, it provides for part payment by the consumer when he is able financially to do so. A deductible provision is also proposed. It becomes a cooperative effort between the Federal agency and the beneficiary —and this is good. Secondly, there are so many proposals by widely differing sponsors that whatever is adopted must surely be a watered down compromise from the most radical and comprehensive form.

For the very first time the American Medical Association is making an honest and unhurried effort to offer some constructive and reasonable plan for universal health care, and will probably be heard with something of dignity and consideration that the chief providers of health care deserve. Our stature has increased very appreciably, we believe, and our cooperation in the shaping of health legislation during this Administration will be desired and accepted—but it behooves us to be alert—to keep informed and to contribute what we may to the direction of health care in the years to come.

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

Health Care In Kentucky And Peer Review Are To Be Discussed At 1971 KMA Interim Meeting, April 15-16, At Cave City

William P. McElwain, M.D., Frankfort, Commissioner, Kentucky Department of Health, will be one of the outstanding speakers to be featured at the 1971 Interim Meeting, April 15-16, at Cave City.



Doctor McElwain

A graduate of the University of Louisville School of Medicine, Doctor McElwain has been in public health work since 1961. He became Kentucky's Commissioner of Health in September, 1970, after serving as both Deputy and Acting Commissioner. He will speak on "Health Care in Kentucky" at the April 16 session.

The April 15 session will begin with a panel discussion on liability insurance. Moderated by Thornton Bryan, Jr., M.D., Cadiz, this discussion will be held by Riley Lassiter, Louisville, Medical Protective Company; and David Powers, Chicago, American Medical Association. A question and answer session will follow.

Tim Lee Carter, M.D., Member, U.S. House of Representatives, will be the featured speaker at the dinner on the evening of April 15. He will speak on "Congress and Health Care."

Carl Anderson, M.D., Santa Rosa, California, member of the National Blue Shield Board of Directors, will speak on "Peer Review and the Voluntary System," at the Friday morning session. This will be followed by a panel discussion on "Peer Review in Action," led by Marvin A. Bowers, M.D., Louisville, Chairman, KMA Claims and Utilization Review Committee. Also featured on this panel will be Richard L. Wilbur, M.D., Chicago, Deputy Executive Vice-President of AMA.

For the first time at a KMA Interim Meeting, there will be no business sessions scheduled in the afternoon. The members and their families will be free to use the recreational facilities at Cave City.

The Woman's Auxiliary to KMA will hold their usual sessions in conjunction with the Interim Meetings. Their featured speaker is Mrs. Linus W. Hewit, the National Chairman of the Community Health Committee of the Woman's Auxiliary to AMA.

All physicians are urged by John C. Quertermous, M.D., Murray, KMA President, to make plans to attend this two-day session and to secure reservations as soon as possible. For your convenience, a reservation form can be found on page 120 of this *Journal*.

Ky. Physicians Are Reappointed To AMA Council, Committees

Five Kentucky physicians were reappointed to membership on councils and committees of the American Medical Association. The Board of Trustees of AMA recently held its annual review of the membership and made appointments for 1971.

William T. Rumage, Jr., M.D., Louisville, was reappointed to the Council on National Security and to the Commitee on Community Emergency Services. William K. Keller, M.D., Louisville, was reappointed Chairman of the Committee on Medical Aspects of Automotive Safety.

Other reappointments include: David B. Stevens, M.D., Lexington, Committee on Quackery, and J. C. Cantrill, M.D., Georgetown, Committee on Medicine and Religion.

Robert W. Lykins, M.D., Louisville, was reappointed to the AMA Interspecialty Committee, representing the American Society of Anesthesiologists.

Senior Day Programs To Be Held March 15 And May 11

The 1971 Senior Day program for the University of Louisville senior medical students will be sponsored by the Jefferson County Medical Society on March 15. Tentatively scheduled to be held at the Medical Arts Building in Louisville, the meeting will feature an open discussion session between students and a panel of Jefferson County physicians. It is to be followed by a social hour and dinner.

KMA's University of Kentucky Senior Day program, held in conjunction with the Fayette County Medical Society and the University of Kentucky College of Medicine, will be presented in Lexington on May 11.

Kentucky Physicians Attend AMA Clinical Convention

Twenty-six Kentucky physicians attended the AMA Clinical Convention held in Boston, November 29-December 3, according to the records of AMA. A complete list of those attending follows:

Henry B. Asman, M.D., Louisville
John P. Bell, M.D., Louisville
T. H. Biggs, M.D., London
George F. Brockman, M.D., Greenville
Neil H. Brooks, M.D., Ashland
Charles G. Bryant, M.D., Louisville
Edward R. Cadden, M.D., Louisville
Raymond F. Crystal, M.D., Fort Campbell
Rodney R. Dick, M.D., Whitesburg
J. Thomas Giannini, M.D., Louisville
Henri Gordon, M.D., Lexington
John S. Harter, M.D., Louisville
Daryl P. Harvey, M.D., Glasgow
Robert C. Long, M.D., Louisville
Robert W. Lykins, M.D., Louisville
Merle M. Mahr, M.D., Madisonville
Joseph L. Milburn, M.D., Madisonville
Adolfo Millan, M.D., Louisville
Owen B. Murphy, M.D., Lexington
John C. Quertermous, M.D., Murray
Charles C. Rutledge, M.D., Hazard
Fred J. Sigda, M.D., Madisonville
David B. Stevens, M.D., Lexington
Franklin G. Strauss, M.D., Fort Campbell
L. E. Wallace, M.D., Lexington
Carroll L. Witten, M.D., Louisville

17th Annual Symposium Planned On Cardiovascular Diseases

The Seventeenth Annual Symposium on Cardiovascular Diseases will be held in Louisville, March 11-13, at Stouffer's Louisville Inn, according to John L. Wolford, M.D., Louisville, Chairman of the Symposium, and Robert S. Dyer, M.D., Louisville, Co-chairman.

The theme for the sessions is "Coronary Artery Disease and Related Topics." This year, for the first time, five concurrent discussion workshops will be held on the last day.

Other highlights of the meeting are the Bernard D. Rosenblum Memorial Lecture by H. Jeremy C. Swan, M.D., Los Angeles; and "grand rounds" at the new Medical Sciences Center, University of Louisville, conducted by William B. Kannell, M.D., Director of the Framingham Study.

Other speakers for the sessions include Allan K. Rider, M.D., Bethesda; John A. Chadbourn, M.D., New York; Nanette Wenger, M.D., Atlanta; Thomas P. Hackett, M.D., Boston; Augustin Castellanos, M.D., Miami; Charles Fisch, M.D., Indianapolis; and Mortimer J. Buckley, M.D., Boston.

The Symposium is sponsored by the Heart Association of Louisville and Jefferson County; the University of Louisville School of Medicine; the Jefferson County, Kentucky Academy of General Practice; and The Council on Clinical Cardiology, American Heart Association.

Clinical Conference To Be Held At Lexington Clinic

W. Eugene Sanders, Jr. M.D., of the Infectious Disease Division of the University of Florida College of Medicine, is to be one of three guest speakers at the Sixteenth Annual Spring Clinical Conference presented by the Lexington Clinic. To be held April 1, the conference will be a one-day symposium on infections diseases.

Doctor Sanders will deliver the Fourth Annual Carl Fortune Lecture. The subject this year is "Failure of Appropriately Chosen Antibiotics—What Do I Do Next?"

Other featured speakers are Warren E. Wheeler, M.D., Professor and Chairman of the Department of Pediatrics at the University of Kentucky Medical Center; and Robert J. Joynt, Jr., M.D., Professor of Neurology, Neurologist in Chief, at the University of Rochester School of Medicine and Dentistry. Eight members of the clinic staff will also present scientific papers at this day-long session.

Among the subjects to be discussed, beginning at 9:00 a.m., April 1, are "Viral Encephalitis," "Infectious Disease in the Central Nervous System," "Advances in Treatment of Pediatric Infectious Diseases," and "Endobronchial Tuberculosis."

Are You Qualified To Vote May 25?

In order to vote in the May 25 Primary Election you must be properly registered by March 27, according to Fred C. Rainey, M.D., Elizabethtown, Chairman of the KMA Committee on Legislative Activities for State Affairs. Doctor Rainey urges all members, their families, and staff to qualify and vote in the May 25 primary.

If there has been any change in your status, you should check to see if you must register, the KMA Chairman said.

A new governor, lieutenant governor, all top state officials, 19 senators and 100 representatives will be elected this year in Kentucky.

Dr. Hoyt D. Gardner Elected Chairman Of AMPAC Board

Hoyt D. Gardner, M.D., Louisville, was elected Chairman of the Board of the American Medical Political Action Committee at a meeting held in Phoenix, Arizona, on January 23-24, 1971.



Doctor Gardner

The 1950 University of Louisville Medical School graduate, who has practiced general surgery in Louisville since 1957, is one of the profession's most outspoken orators for physician involvement in political and civic affairs. In following his own "orders," Doctor Gardner's list of activities on behalf of his profession is long and diverse. He is a 14-year member of KMA, and during that time has been Chairman of the Senior Day Program; Chairman for National Affairs of the Committee on Legislative Activities; SAMA Representative for the University of Louisville since 1960; and has served as Secretary and Chairman of KEMPAC.

He has not neglected his duties at the county level, and has served as President and on many committees of the Jefferson County Medical Society. He is a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons, a member of AMA, and the Kentucky and Southwestern Surgical Societies.

He has found time in a busy schedule to be an instructor in Medical Civics at the University of Louisville Medical School, where he also has served as an Associate Professor in the Department of Surgery. He has served on the City-County Board of Health and given innumerable hours toward helping to provide better health care facilities for Louisville and Jefferson County.

Prior to his election as Chairman of the AMPAC Board, Doctor Gardner served four year as a member of the Board and one year as Treasurer of the organization. During these years he has traveled thousands of miles throughout the United States speaking to medical groups concerning the vital importance of physician involvement in government and political affairs.

Hospital Standards Revised By Accreditation Board

The Board of Commissioners of the Joint Commission on Accreditation of Hospitals gave final approval to the revised Standards for hospital accreditation at the recent meeting of the Board, according to the Joint Commission's Director, John D. Porterfield, M.D., Chicago. In taking this action, the Board stipulated that the Standards be implemented as the basis for accreditation three months after their publication.

The document is scheduled to be published by April 1, 1971, according to Doctor Porterfield. A single copy will be sent without charge to all registered hospitals in the United States and all accredited hospitals overseas.

Ky. Court Of Appeals Adopts 'Discovery' Rule

The Court of Appeals of Kentucky has abandoned the long-standing rule that the one-year statute of limitations applicable to malpractice actions commences to run on the date of injury; and it has adopted the so-called "discovery" rule, which is that the statute commences to run when the patient discovers, or should (by the exercise of ordinary diligence) have discovered the injury.

It held that a woman who became pregnant more than one year after a tubal ligation could file her action within one year after she learned she was pregnant.

This ruling makes it doubly important for physicians to keep detailed records, since they may be called upon, years later, to explain how they performed a particular procedure and to describe any unusual aspects of the case which could account for the condition which gave rise to the suit.

Rodger J. Zwemer, M.D., has joined the faculty of the University of Louisville School of Medicine. A graduate of the Wayne State University, Doctor Zwemer interned at the Fitzsimmons Army Hospital and served his residency in pediatric allergy at the Children's Hospital of Michigan.

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Digest Of Board Of Trustees Minutes December 10, 1970, Presented

The Board of Trustees held its second meeting of the 1970-71 Associational year at the KMA headquarters building on December 10, 1970. The Chairman of the Board of Trustees introduced J. Wesley Johnson, M.D., Ashland, new member of the Board, and reported that KMA had been notified on December 8, 1970, of the death of Robert F. Long, M.D., Somerset, former member of the Board of Trustees.

Accepted for information were the President's report, the headquarters office report, and the report of the Senior Delegate to AMA. A general mailing was authorized in support of Carroll L. Witten, M.D., Louisville, in his bid for re-election to the AMA Council on Constitution and Bylaws. Walter I. Hume, Jr., M.D., Louisville, Chairman of the Committee on Medical Education, reported that the Biennial Conference on Medical Education was to be held January 23 and 24, 1971, at Park Mammoth Lodge. The Board of Trustees acted affirmatively on the program recommendations of the Committee on Medical Education so that they could make preparations for the conference.

Legal counsel reported on a number of matters at the request of the Board of Trustees to include the subjects of chiropractic, a court case involving the statute of limitations, incorporation of the Auxiliary, and a Judicial Council request relating to Bonco Labs, Inc. Further attempts to obtain names and addresses of all Bonco Lab stockholders was authorized.

A maternity case involving the Prestonsburg Hospital was discussed at length. A statement was prepared and presented to the Press, following the meeting, which set forth KMA's position on this matter, based on the information available.

John A. Logan, M.D., Henderson, and Donald C. Barton, M.D., Corbin, were nominated by the KEMPAC Board to succeed John C. Quertermous, M.D., Murray, and Meredith J. Evans, M.D., Middlesboro. These recommendations were accepted by the Board of Trustees.

The Board voted to support "current procedural terminology" as the system of coding for medical and surgical procedures. This action, endorsing use of the five-digit code, will be reported to all interested parties for long range planning purposes. The Chairman then announced the appointment of a Peer Review Study Committee in compliance with Resolution D, passed by the House of Delegates in September, 1970.

A letter was read from Marvin C. Bowers, M.D., Louisville, requesting that trustee district claims and utilization review committees be deferred until framework and guidelines can be established. It was taken by consent that this be postponed as requested. Robert C. Long, M.D., Louisville, reported on the current activities and goals of the newly formed Public Relations Committee to include implementation of specific actions referred to it by the Board. It was further noted that KMA's public relations' consultant will begin his duties January 1, 1971.

A discussion was held concerning dates and conflicting conventions for the 1972 Annual Meeting. The Board voted to set the dates for the 1972 Annual Meeting as September 19-21 to avoid conflict with an International Furniture Convention. The dates had previously been a week later.

The Committee on Health Careers presented five recommendations to the Board, and they were accepted for implementation during this Associational year. These ranged from endorsements of allied career training programs to authorization for construction of an exhibit. The Ad Hoc Committee on Chiropractic made five recommendations concerning its proposed educational programs and other activities. After the discussion, the Board authorized the Ad Hoc Committee to proceed as outlined in their proposals.

The Board voted, after discussion by the Legislative Committee, that the annual Washington Dinner would be held on March 15 and 16, 1971, immediately following the AMPAC Seminar in the same location.

John C. Quertermous, M.D., Murray, President of KMA, reported on the meeting of the Interim Meeting Committee, noting that it will be held on April 14, 15, 16, 1971, at Cave City Holiday Inn, and an excellent program has been planned.

George C. Brockman, M.D., Greenville, Chairman of the Building Committee, reported on his committee's activities. Authorization was given for the committee to explore architects that might be used and for representatives of KMA to visit the Mississippi State Medical Association building to discuss plans for KMA's proposed addition. Doctor Brockman also reported, as Chairman of the KMA Advisory to the Woman's Auxiliary, that request for a coordinator, on a part-time basis, had been made by the Auxiliary. The Board recommended that this request be approved ($600 authorized), and that it be considered on a temporary basis to determine whether or not it will be helpful to the work of the Auxiliary and KMA. The trial period will commence March 1, 1971, and cease at the end of this Associational year.

After lengthy discussion, a recommendation of the Hospital Committee concerning liability of physicians and hospitals resulting from blood transfusions was accepted by the Board and implementation was requested. The recommendation asked that the Legislative Committee take proper action at the legislative level and that the Committee on Medical Economics review AMA model liability insurance proposals for possible use in Kentucky.

Recommendations for appointments to the Advisory Council on Health Facilities, the State Board of Health, and the Comprehensive Health Planning Council were made and forwarded to the Governor.

The Board recommended that AMA be requested to conduct a "Leadership Training Seminar" for KMA some time during the latter part of 1971. This recommendation was forwarded to AMA for their review and response.

There was a brief discussion concerning the appointment of alternate trustees as delegates to the KMA House of Delegates. It was taken by consent that this matter be referred to the Executive Committee for study and recommendations back to the Board.

The meeting adjourned following announcements of several committee appointment replacements and of Senior Day dates: University of Louisville, on March 15, and University of Kentucky, on May 11.

The next meeting of the Board was set for April 14, 1971, at Holiday Inn, Cave City.

Drug Handbook For Sale

A new "Handbook of Drug Interactions" by Doctor Edward Hartshorn is now available from the University of Kentucky College of Pharmacy. This handbook is concerned with the general consideration of drug interactions and discussion of the mechanism of drug interaction; it contains discussion on specific interactions of the different drug classes.

The cost of the handbook is $5.00, and the money collected from the sale of the book will be used to sponsor students attending the 1971 National APhA Convention in San Francisco.

Orders can be placed with: University of Kentucky SAPhA, c/o Mr. Vance Smith, 450 Rose Lane, Lexington, Kentucky 40503.

County Medical Societies List Officers For 1971

The following lists of officers and delegates of county societies for 1971 have been received by the KMA membership department as of January 14, 1971.

Bullitt
President: James W. Roney, M.D., Lebanon Junction
Secretary: William B. Hamilton, M.D., Shepherdsville
Delegate to KMA: R. Steven Bowen, Mount Washington
Alternate: Samuel T. Vanover, M.D., Shepherdsville

Clinton
President: Ernest A. Barnes, M.D., Albany
Secretary: Floyd B. Hay, M.D., Albany
Delegate to KMA: Ernest A. Barnes, M.D., Albany
Alternate: Floyd B. Hay, M.D., Albany

Daviess (until June 15, 1971)
President: Charles E. Hornaday, M.D., Owensboro
Vice-President: R. John Sanders, M.D., Owensboro
President-Elect: R. John Sanders, M.D., Owensboro
Secretary-Treasurer: William R. Gabbert, M.D., Owensboro
Delegates to KMA: John S. Oldham, M.D., Owensboro
Coy E. Ball, M.D., Owensboro
William E. Pearson, M.D., Owensboro
Alternates: John E. Bickel, M.D., Owensboro
R. C. Neblett, M.D., Owensboro

Fayette
President: James B. Holloway, M.D., Lexington
Vice-President: Colby N. Cowherd, M.D., Lexington
Secretary-Treasurer: James G. Wilhite, M.D., Lexington
Delegates to KMA: Ted D. Ballard, M.D., Lexington
Winston L. Burke, M.D., Lexington
Richard D. Floyd, M.D., Lexington
Ward O. Griffen, M.D., Lexington
Richard F. Hench, M.D., Lexington
Irving F. Kanner, M.D., Lexington
W. Porter Mayo, M.D., Lexington
Carl H. Scott, M.D., Lexington
Ben C. Stigall, M.D., Lexington
John E. Trevey, M.D., Lexington

Floyd
President: William D. Pratt, M.D., McDowell
Vice-President: William B. Cook, M.D., Prestonsburg
Secretary-Treasurer: James A. Holdbrook, M.D., Prestonsburg
Delegate to KMA: Lowell F. Roberts, McDowell
Alternate: George P. Archer, Prestonsburg

Garrard
President: O. S. Playforth, M.D., Lancaster
Vice-President: B. Glen Hicks, M.D., Lancaster
Secretary-Treasurer: Paul J. Sides, M.D., Lancaster
Delegate to KMA: O. S. Playforth, M.D., Lancaster
Alternate: Paul J. Sides, M.D., Lancaster

Henderson
President: Richard Wham, M.D., Henderson
Vice-President: John L. Jenkins, M.D., Henderson
Secretary-Treasurer: Jack D. Bland, M.D., Henderson
Delegates to KMA: Kenneth M. Eblen, M. D., Henderson
John W. McClellan, M. D., Henderson
Alternates: Roy W. Montgomery, M. D., Henderson
O. T. Evans, M. D., Henderson

Jackson
President and Delegate to KMA: Donald L. Peterson, M.D., McKee

Jefferson
President: Walter S. Coe, M.D., Louisville
Vice-President: William J. Sandman, Jr., M.D., Louisville
President-Elect: Glenn W. Bryant, M.D., Louisville
Treasurer: Stuart E. Harlowe, M.D., Louisville
Secretary: Thomas E. Campbell, M.D., Louisville
Delegates to KMA:
(All of Louisville)

Terms Expire May, 1971
James G. Baker, M.D.
Elbert G. Christian, M.D.
Frank M. Gaines, Jr., M.D.
Richard F. Greathouse, M.D.
Cecil L. Grumbles, M.D.
Harold Haller, Sr., M.D.
N. I. Handelman, M.D.
Edward N. Maxwell, M.D.
Herman R. Moore, Jr., M.D.
Carroll H. Robie, M.D.
Charles C. Smith, Jr., M.D.

Terms Expire May, 1972
John D. Allen, Jr., M.D.
William H. Bizot, M.D.
Thomas E. Booth, M.D.
Fred E. Coy, Jr., M.D.
Morgan R. Colbert, M.D.
John H. Doyle, M.D.
Lonnie W. Howerton, Jr., M.D.
Stuart M. Hunter, M.D.
Clyde T. Moore, M.D.
Charles R. Oberst, M.D.
John L. Wolford, M.D.

Terms Expire May, 1973
Frank A. Bechtel, M.D.
Peter C. Campbell, Jr., M.D.
W. Neville Caudill, M.D.
Stanley W. Collis, M.D.
John N. Goldsborough, M.D.
Charles M. Hargadon, M.D.
Michael G. Kemper, M.D.
Robert L. McClendon, M.D.
Bernard I. Popham, M.D.
W. Fielding Rubel, M.D.
Edwin P. Solomon, Jr., M.D.

(Continued on page 131)

NEWS ITEMS

Andrew M. Moore, M.D., Lexington, was elected Vice Chairman of the Council of the Southern Medical Association at the 64th Annual Meeting of the group held in Dallas last November. Doctor Moore is the Immediate-Past Trustee for KMA from the Tenth District.

Arnold M. Ludwig, M.D., a psychiatrist, has joined the University of Kentucky Medical Center. A graduate of the University of Pennsylvania Medical School, Doctor Ludwig served his residency at the University of Colorado Medical Center. He has previously practiced at the Mendotta State Hospital in Madison, Wis.

Clem E. Nichols, M.D., is now practicing with James D. Walker, M.D., in Louisville. In family practice, Doctor Nichols graduated from the University of Louisville Medical School in 1969 and interned at Louisville General Hospital.

John L. Hollinsworth, M.D., a specialist in obstetrics and gynecology, has joined Doctors Silas H. Starr, Edwin P. Solomon, Jr., William E. Oldham, and Glenn W. Bryant in practice in Louisville. A graduate of the University of Louisville Medical School, Doctor Hollinsworth served in the U.S. Air Force from 1968 to 1970.

Frederick L. Remark, M.D., has recently joined the staff of the University of Kentucky Medical Center. A specialist in plastic surgery, Doctor Remark is a graduate of the Ohio State University Medical School. He served his internship and residency at the University of Illinois.

Mahmood Hosseinipour, M.D., is practicing at the Daniel Boone Clinic in Harlan. A specialist in obstetrics and gynecology, Doctor Hosseinipour served his residency at the St. Ann Hospital and Church Home and Hospital in Baltimore. He is a native of Iran.

KENTUCKY MEDICAL ASSOCIATION
INTERIM MEETING, APRIL 15-16, 1971
REQUEST FOR ACCOMMODATIONS RESERVATION

Complete and mail directly to Holiday Inn, Cave City. This reservation is for the night of April 15 ONLY.

☐ Room with two beds, one person — $11.00

☐ Room with two beds, two people — $14.00

RESERVATIONS SHOULD BE MADE
NO LATER THAN MARCH 25, 1971

Names of those sharing accommodations:

Name _____

Name _____

Name _____

Address to which confirmation to be sent: _____
Street Address

City State Zip Code

Return reservation request to: Holiday Inn, Cave City, Kentucky 42127; telephone 502-773-2931.

Note: This reservation is for the Kentucky Medical Association meeting, April 15-16, 1971.

Commissioner Farabee Appointed To Committee On Alcoholism

Dale H. Farabee, M.D., Commissioner of the Kentucky Department of Mental Health, has been appointed to the National Advisory Committee on Alcoholism, according to Elliot L. Richardson, Secretary of Health, Education, and Welfare.

Doctor Farabee is a leading organizer of alcoholism programs in Kentucky. He established the Office of Alcoholism in the Kentucky Department of Mental Health and initiated the first programs in Kentucky for the treatment and rehabilitation of acloholics in a community mental health center setting.

The National Advisory Committee on Alcoholism was created in October, 1966, to provide the DHEW with advice and guidance concerning the Depart-ent's role in reducing the incidence of alcoholism and the other problems of alcohol use and abuse.

KEMPAC Directors Appointed

John A. Logan, M.D., Henderson; Donald C. Barton, M.D., Corbin; and William O. Massey, M.D., Burnside, were appointed to the KEMPAC Board of Directors in December. They succeed John C. Quertermous, M.D., Murray; Meredith J. Evans,. M.D., Middlesboro; and John P. Hill Jr., M.D., Somerset.

1969 Customary Charges To Be Basis For Medicare Payments

Physicians' customary charges during 1969 will be used to determine the "reasonable charge" that will be the basis of reimbursement under Medicare Part B, beginning January 1, 1971, the social security administration recently announced.

The new regulation will also set the 75th percentile of physicians' charges in a given locality as a general limit on the amount Medicare will recognize as a reasonable charge. The limit was previously the 83rd percentile. KMA continues to urge Kentucky physicians to bill "usual and customary" to both Medicare and Medicaid.

FDA Withdraws Approval Of 3,000 Drugs

As of 1962, the Food, Drug and Cosmetic Act required drugs to be approved not only on the basis of safety, but also on the basis of substantial evidence of efficacy. The Food and Drug Administration enlisted the aid of the National Academy of Sciences and National Research Council to review the evidence of efficacy of some 3,000 drugs.

After evaluation of NAS and NRC, the FDA announced its intention to withdraw approval of numerous drugs and/or products.

KMA has received a list of these drugs, and it is also available to you from the Food and Drug Administration, Bureau of Drugs, 5600 Fishers Lane, Rockville, Maryland 20852.

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Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1971 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 21, 22, 23**

Fill Out and Mail to:

BENJAMIN B. JACKSON, M.D., Chairman

Committee on Scientific Exhibits

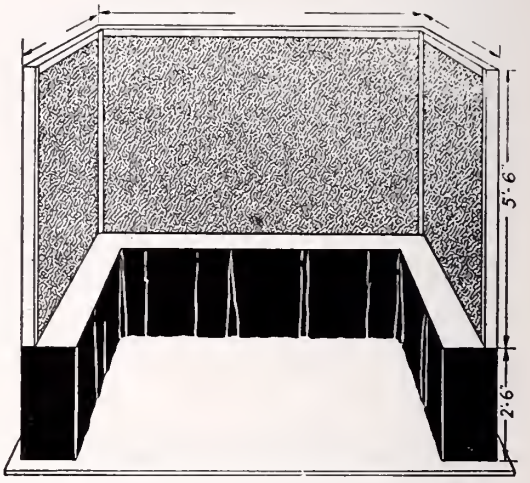
Kentucky Medical Association

3532 Ephraim McDowell Drive

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1971.

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit:
2. Name (s) of Exhibitor (s):

 Institution (if desired):

 Mailing Address:
3. Do you have a built-in exhibit?
4. Description of Exhibit: (Attach brief description not to exceed 50 words to this blank.)
5. Exhibit will consist of the following: (check which)

 Charts and Posters.... Photographs.... Drawings.... X-rays

 Specimens.... Moulages.... Other Material (Describe)
6. Booth Requirements:

 Amount of total wall space needed?

 Back wall?

 Shelf desired? (yes or no)
7. Indicate sources of assistance provided to you in connection with the exhibit.
8. Has this exhibit been exhibited before? If so, when & where?

Date

Signature of Applicant

The Kentucky Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 40202, who supply equipment for the annual KMA meeting.

Due to the shortage of space, please have your exhibit as compact as possible.



CALORIES / 7 oz. Serving*

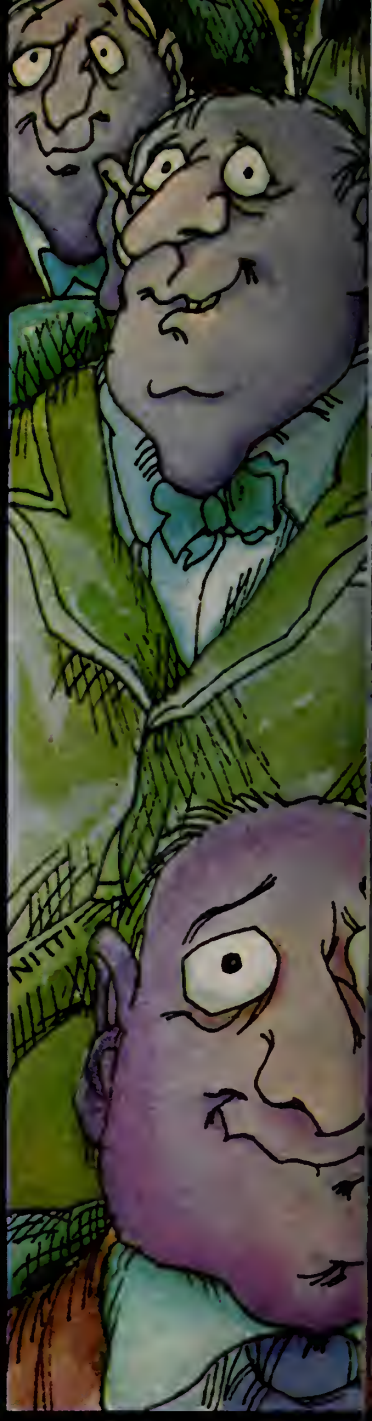
Beef Broth	22	Vegetable	68
Consommé	29	Tomato	69
Chicken with Rice	43	Cream of Asparagus	70
Chicken Gumbo	48	Cream of Chicken	76
Chicken Noodle	54	Cream of Mushroom	115
Cream of Potato	58	Green Pea	116
Chicken Vegetable	60	Cream of Shrimp (Frozen)	132
Vegetable Beef	66	Bean with Bacon	133

In planning high or low calorie diets, Campbell's more than 50 different soups offer you a wide choice. And, most of Campbell's Soups contain a wide variety of ingredients that can serve as supplementary sources of many essential nutrients.

* From "Nutritive Composition of Campbell's Products" which gives values of important nutritive constituents of all Campbell's Products. For your copy, write to Campbell Soup Company, Dept. 536, Camden, New Jersey 08101.

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When the stage is set for diarrhea...



Diarrhea . . . thwarted once again!

Time after time . . . just when plans seem sure to be shattered . . . the effective and prompt action of Lomotil comes to the rescue.

Here is an antidiarrheal with a performance record that few can challenge. A versatile actor, Lomotil stars in the treatment of diarrhea associated with gastroenteritis, irritable bowel, functional hypermotility, regional enteritis, malabsorption syndrome, drugs, acute infections, ulcerative colitis and food poisoning. In addition, it plays a major role in the control of intestinal transit time in patients with ileostomies and colostomies and of the diarrhea occurring after gastric surgery.

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Each tablet and each 5 cc. of liquid contain:
Diphenoxylate hydrochloride . . . 2.5 mg.
(Warning: may be habit-forming)
Atropine sulfate 0.025 mg.

Saves the Show

Warnings: Lomotil should be used with caution in patients taking barbiturates and, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is a federally exempt narcotic with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages should not be exceeded, and medication should be



kept out of reach of children. Signs of accidental overdosage may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise.

Overdosage: The medication should be kept out of reach of children since accidental overdosage may cause severe, even fatal, respiratory depression.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:
3-6 mo. . . . ½ tsp.* t.i.d. (3 mg.)
6-12 mo. . . ½ tsp. q.i.d. (4 mg.)
1-2 yr. ½ tsp. 5 times daily (5 mg.)
2-5 yr. 1 tsp. t.i.d. (6 mg.)
5-8 yr. 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . . 1 tsp. 5 times daily (10 mg.)
Adults: 2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Use of Lomotil is not recommended in infants less than 3 months of age.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

SEARLE Research in the Service of Medicine
G. D. Searle & Co., Chicago, Illinois 60680

Nothing new about Synirin other than ...it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

Synirin®

ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

ETHICAL ANALGESIA (economical if prescribed in 100 units with privilege of refills)

PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

EACH UNCOATED TABLET CONTAINS:

Aspirin 325 mg. (5 gr.)
Pentobarbital* 8 mg. (1/8 gr.)
*May be habit forming.

Federal law prohibits dispensing without prescription
DISPENSED IN BOTTLES OF 100 AND 1000 TABLETS

WILLIAM P. POYTHRESS & COMPANY, INC.
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A clinical supply of this new aspirin formulation may be requested.

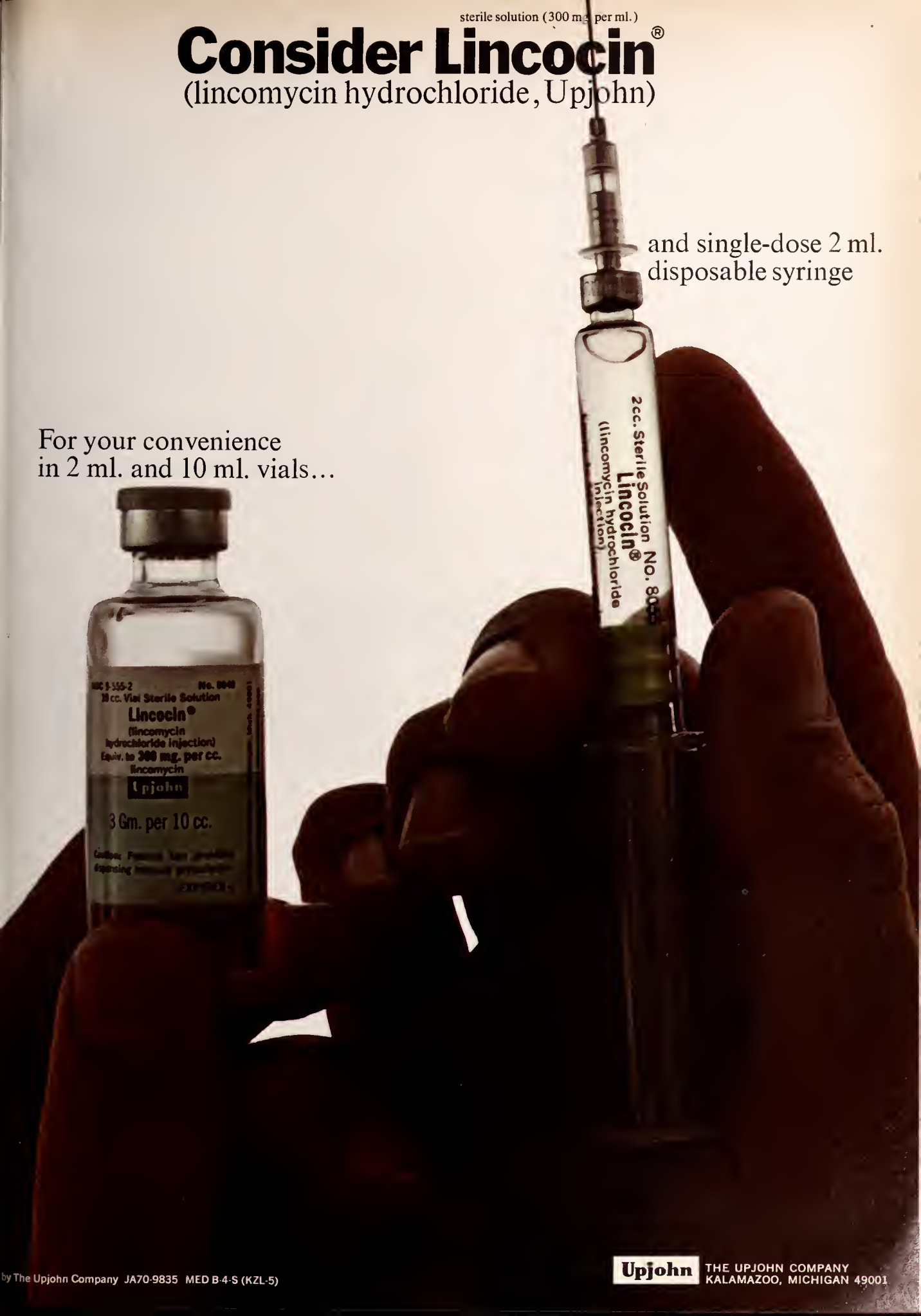
sterile solution (300 mg. per ml.)

Consider Lincocin®

(lincomycin hydrochloride, Upjohn)

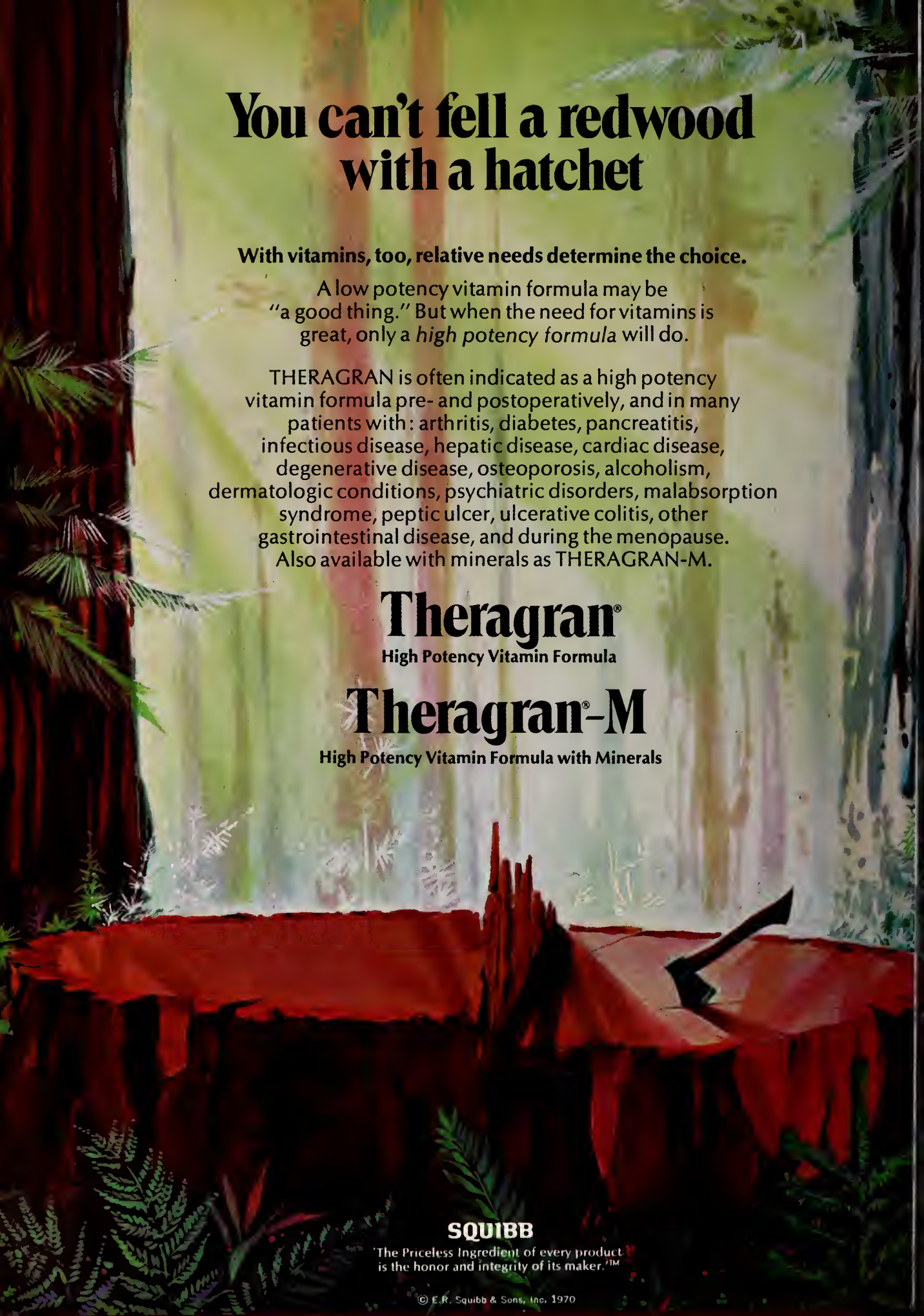
and single-dose 2 ml.
disposable syringe

For your convenience
in 2 ml. and 10 ml. vials...



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You can't fell a redwood with a hatchet
With vitamins, too, relative needs determine the choice.
A low potency vitamin formula may be "a good thing." But when the need for vitamins is great, only a high potency formula will do.
THERAGRAN is often indicated as a high potency vitamin formula pre- and postoperatively, and in many patients with: arthritis, diabetes, pancreatitis, infectious disease, hepatic disease, cardiac disease, degenerative disease, osteoporosis, alcoholism, dermatologic conditions, psychiatric disorders, malabsorption syndrome, peptic ulcer, ulcerative colitis, other gastrointestinal disease, and during the menopause. Also available with minerals as THERAGRAN-M.
Theragran®
High Potency Vitamin Formula
Theragran®-M
High Potency Vitamin Formula with Minerals
SQUIBB
"The Priceless Ingredient of every product is the honor and integrity of its maker."™
© E.R. Squibb & Sons, Inc. 1970

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

'B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

the incomplete B-complex

SPECIFICALLY FOR LEVODOPA PATIENTS—NUTRITIONAL SUPPORT WITHOUT PYRIDOXINE

Larobec provides: B-complex vitamins, of particular importance to the patient who is on levodopa therapy and is deficient in water-soluble vitamins.

Larobec provides: Ascorbic acid, useful in assisting tissue repair in the debilitated patient.



Larobec does *not* provide: Pyridoxine (vitamin B_6)—which reportedly reverses the antiparkinson effects of levodopa therapy.[1,2]

Larobec™ Tablets

A high-potency nutritional supplement specific to the needs of patients with Parkinson's disease and syndrome on levodopa therapy—that describes new Larobec™ from Roche. Larobec provides the major B vitamins plus vitamin C—*but does not provide pyridoxine.* Thus, with its specially tailored formula, Larobec assures the patient important nutritional support without minimizing any of the benefits of levodopa therapy.

1. Duvoisin, R. C.; Yahr, M.D., and Coté, L. D.: *Trans. Amer. Neurol. Assoc., 94*:81, 1969.
2. Cotzias, G. C.: *J.A.M.A., 210*:1255, 1969.

Complete Prescribing Information:
Each Larobec tablet contains:
Thiamine mononitrate (vitamin B_1) 15 mg
Riboflavin (vitamin B_2) 15 mg
Niacinamide 100 mg
Calcium pantothenate 20 mg
Cyanocobalamin (vitamin B_{12}) ... 5 mcg
Folic acid 0.5 mg
Ascorbic acid (vitamin C) 500 mg

Description: For prophylactic or therapeutic nutritional supplementation concomitant with levodopa therapy in patients with Parkinson's disease and syndrome, Larobec provides high potency dosages of the major B-complex vitamins, without pyridoxine (vitamin B_6) which has been reported[1,2] to reduce the clinical benefits of levodopa therapy. B-complex vitamins are essential in the anabolism of carbohydrate and protein and in hematopoiesis. Larobec also contains therapeutic quantities of ascorbic acid, a substance involved in intracellular reactions such as tissue repair and collagen formation.

Indications: Larobec is indicated for supportive nutritional supplementation when a water-soluble vitamin formula (without pyridoxine) is required prophylactically or therapeutically in patients under treatment with levodopa.

Warning: Administration of vitamin B_6 may be required if signs of pyridoxine deficiency develop. Larobec is not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.

Dosage and Administration: One or two tablets daily, as indicated by clinical need.

How Supplied: Orange-colored, capsule-shaped tablets, imprinted Roche 73; bottles of 100.

References:
1. Duvoisin, R. C., *et al.*: *Trans. Amer. Neurol. Assoc., 94*: 81, 1969.
2. Cotzias, G. C.: *J.A.M.A., 210*:1255, 1969.

high-potency nutritional support for the levodopa patient

Larobec™

ROCHE Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

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(Continued from page 119)

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PLAN

THE SEVENTEENTH ANNUAL SYMI

STOUFFER'S
Louisvil

March 11,

Sponsored by

The Heart Association of Louisville and Jefferson County, Inc.; The University of Louisville School of Medicine; The Jefferson County, Kentucky Academy of General Practice and The Council on Clinical Cardiology, American Heart Association

John L. Wolford, M.D., Chairman
Robert S. Dyer, M.D., Co-Chairman

Thursday, March 11, 1971

Theme: "Coronary Artery Disease—Related Topics"

8:00-10:00 a.m.	Registration—Stouffer's Louisville Inn
8:30- 9:30 a.m.	"Grand Rounds"—University of Louisville Medical Science Center Auditorium William B. Kannel, M.D., Conducting
10:00 a.m.	Morning Session—Stouffer's Louisville Inn
10:00-11:00 a.m.	"Hyperlipidemias: Classification and Role in Coronary Artery Disease" Alan K. Rider, M.D., Clinical Associate, National Heart and Lung Institute, Bethesda, Maryland
11:00-11:45 a.m.	"Office Identification of the Potential Coronary Candidate" William B. Kannel, M.D., Medical Director, Heart Disease Epidemiology Study, National Institutes of Health, Framingham, Massachusetts
11:45-12:30 p.m.	"Mobile Coronary Care Unit" John A. Chadbourn, M.D., Clinical Assistant, St. Vincent's Hospital; Assistant Project Director, Mobile Coronary Care Unit, New York, N.Y.
	LUNCH
2:00- 2:30 p.m.	"Rehabilitation of Patient with Acute Myocardial Infarction" Nanette Wenger, M.D., Associate Professor of Medicine, Emory University School of Medicine and Director, Cardiac Clinics, Grady Memorial Hospital, Atlanta, Georgia
2:30- 3:00 p.m.	"Emotional Problems Facing the Patient with Acute Myocardial Infarction During Convalescence and Rehabilitation" Thomas P. Hackett, M.D., Chief, Psychiatric Consultation Service, Massachusetts General Hospital, Boston, Massachusetts
3:00- 3:20 p.m.	COFFEE BREAK
3:20- 4:00 p.m.	"The Physical Findings in Acute Myocardial Infarction" Nanette Wenger, M.D.
4:00- 4:30 p.m.	"Dietary and Drug Management of Hyperlipidemias" Alan K. Rider, M.D.
4:30- 5:00 p.m.	"Wolff-Parkinson-White Syndrome" Augustin Castellanos, Jr., M.D., Assistant Professor of Medicine, University of Miami School of Medicine, Miami, Florida

REGISTRATION FREE

This program is acceptable for eleven Prescribed H

END
ON CARDIOVASCULAR DISEASES
VILLE INN
tucky
13, 1971

Friday, March 12, 1971

8:30- 9:00 a.m.	Registration—Stouffer's Louisville Inn
9:00 a.m.	Morning Session
9:00- 9:45 a.m.	"Pacemaker Therapy Today: EKG—Recognition—Indications—Types" Augustin Castellanos, Jr., M.D.
9:45-10:30 a.m.	"Cardiogenic Shock—Hemodynamic Changes and Treatment" H. Jeremy C. Swan, M.D., Ph. D., F.R.C.P., Director, Department of Cardiology, Cedars-Sinai Medical Center, Professor of Medicine, University of California, Los Angeles, California.
10:30-11:00 a.m.	COFFEE BREAK
11:00-12:00 p.m.	"Digitalis Toxicity—Incidence, Recognition and Treatment" Charles Fisch, M.D., Professor of Medicine and Director, Cardiovascular Division, Indiana University School of Medicine; Director, Krannert Institute of Cardiology, Marion County General Hospital, Indianapolis, Indiana.
	LUNCH
1:30- 2:30 p.m.	THE BERNARD D. ROSENBLUM MEMORIAL LECTURE "Acute Myocardial Infarction: An Overview" H. Jeremy C. Swan, M.D., Ph.D., F.R.C.P.
2:30- 3:10 p.m.	"Management of Arrhythmias in Acute Myocardial Infarction" Charles Fisch, M.D.
3:10- 3:30 p.m.	COFFEE BREAK
3:30- 4:15 p.m.	"Pacemaker Therapy in Acute Myocardial Infarction" Augustin Castellanos, Jr., M.D.
4:15- 5:00 p.m.	"Cardiac Assists and Surgical Procedures in Coronary Heart Disease" Mortimer J. Buckley, M.D., Assistant Professor of Surgery, Harvard Medical School; Assistant Surgeon, Massachusetts General Hospital, Boston, Mass.

Saturday, March 13, 1971

Morning Session—Stouffer's Louisville Inn
Concurrent Discussion Workshops:

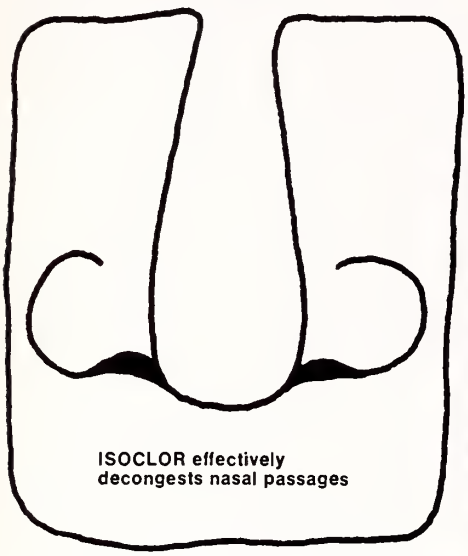
8:30-10:00 a.m.	Groups 1-2-3-4 & 5	FACULTY
	COFFEE BREAK	
10:30-Noon	Groups 1-2-3-4 & 5	
Group #1	"Heart Disease In General" —	Herbert L. Clay, Jr., M.D.; Henry W. Post, M.D.; W. Fielding Rubel, M.D.
Group #2	"Problem EKGs" —	Leonard Leight, M.D.; Morris M. Weiss, Jr., M.D.
Group #3	"Drug Therapy" —	Walter S. Coe, M.D.; Robert S. Dyer, M.D.
Group #4	"Chest X-Rays" —	Edward Fadell, M.D.; George M. Lawson, M.D.
Group #5	"Auscultation" —	F. Albert Olash, M.D.

Admission by ticket only. Groups 1 through 4 limited to twenty-five participants per session. Group 5 limited to twelve participants per session.

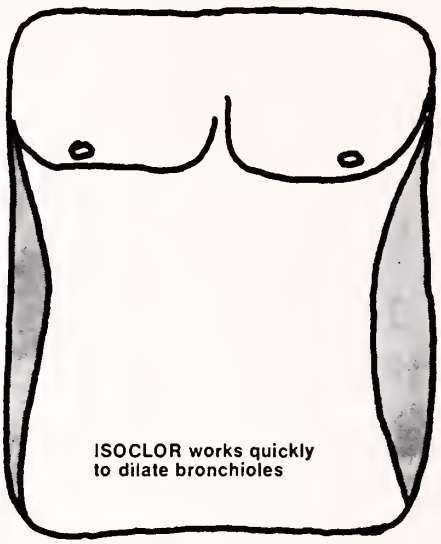
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the American Academy of General Practice.

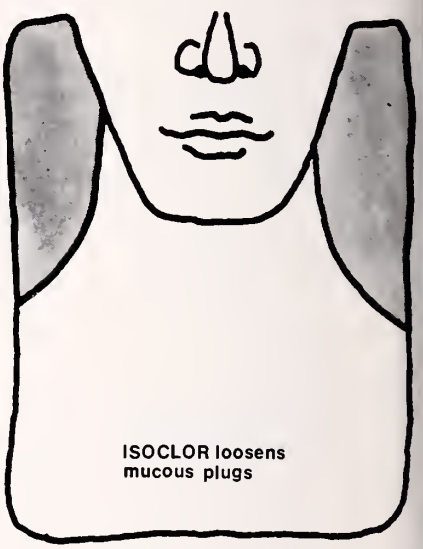
HERE ARE THE COLD FACTS:



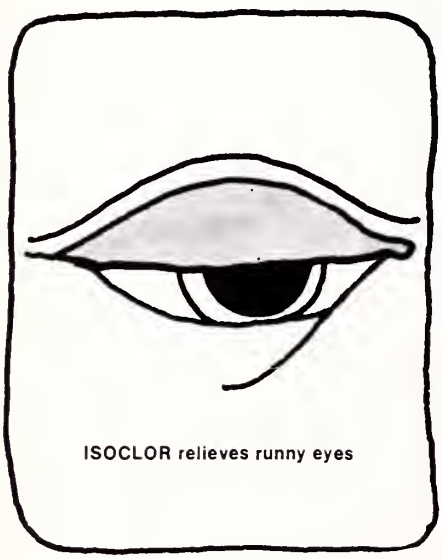
ISOCLOR effectively decongests nasal passages



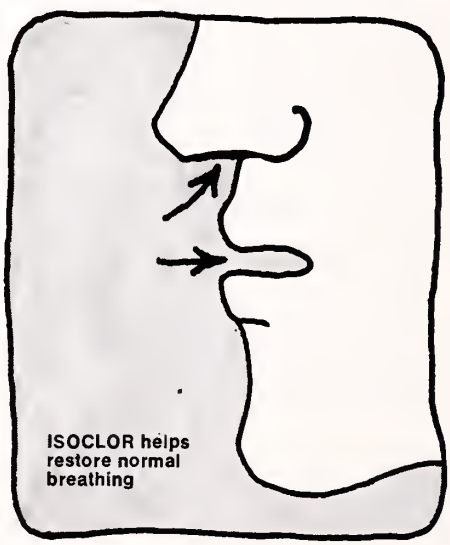
ISOCLOR works quickly to dilate bronchioles



ISOCLOR loosens mucous plugs



ISOCLOR relieves runny eyes



ISOCLOR helps restore normal breathing

ISOCLOR promptly and effectively combats symptomatic miseries of the common cold and influenza



ISOCLOR helps patients face the cold facts

ISOCLOR®

Isoclor provides quick, long lasting relief of respiratory congestion and discomfort brought on by common colds, influenza, and allergies. Isoclor contains chlorpheniramine maleate — one of the most potent and safest antihistamines. And pseudoephedrine HCl — a decongestant bronchodilator providing effective and long lasting relief for the entire respiratory tract. Both work to extend the range of relief.

COMPOSITION: Each tablet or 2 teaspoonfuls of liquid contains:
Chlorpheniramine Maleate.....4 mg.
Pseudoephedrine HCl.....25 mg.

Each ISOCLOR Timesule contains:

Chlorpheniramine Maleate.....10 mg.
Pseudoephedrine HCl.....65 mg.
In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For symptomatic relief of colds, hay fever, allergic conjunctivitis, perennial rhinitis of allergic origin and sinusitis. Opens nasal, sinus and bronchial passages orally.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients suffering with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100 and 1000. Liquid: 4 oz. bottles, pints, and gallons; Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

ARNAR-STONE LABORATORIES, INC.
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Mount Prospect, Illinois 60056

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

works on the appetite not on the 'nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Controindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

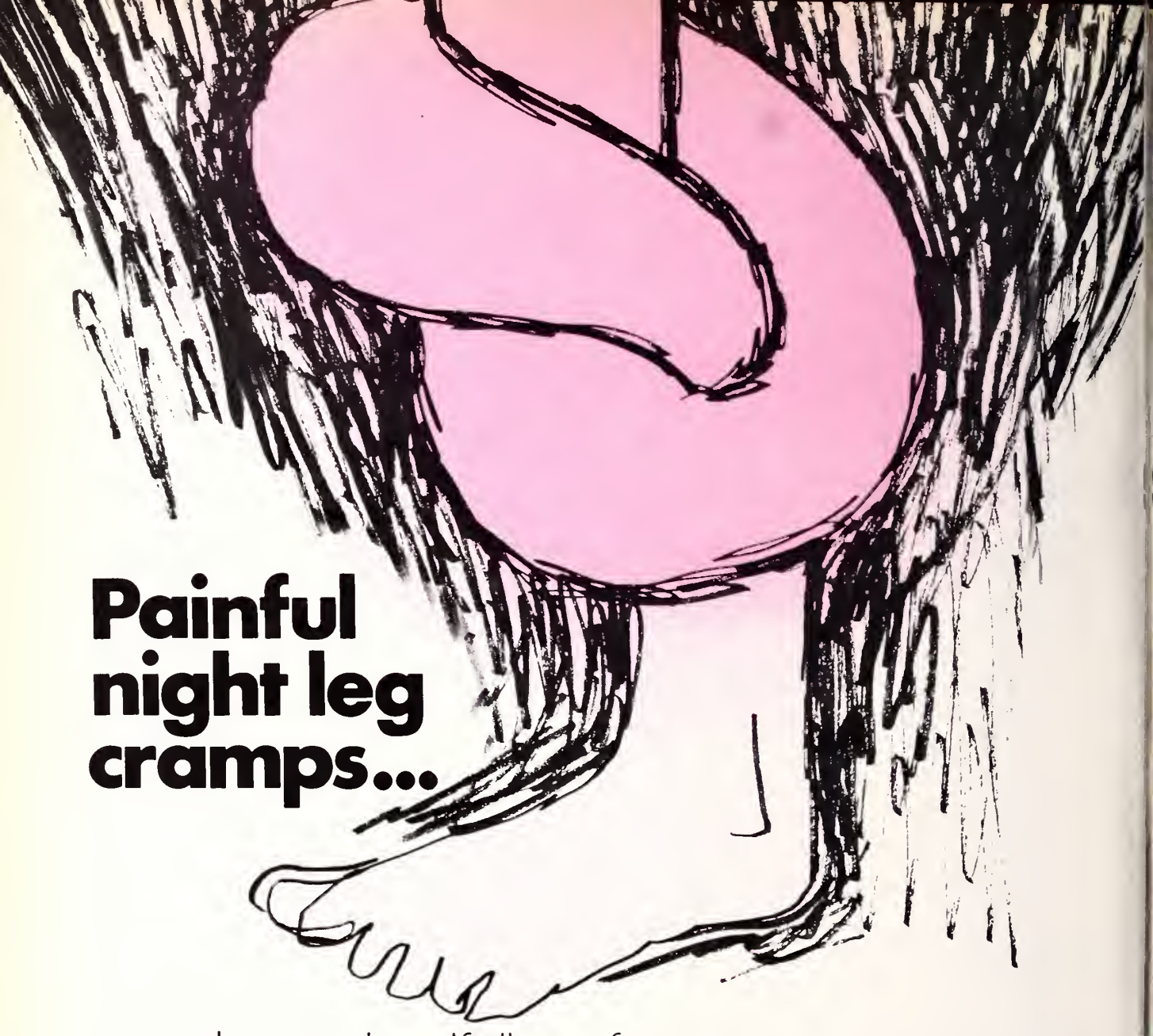
Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-103 / 2/71 / U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

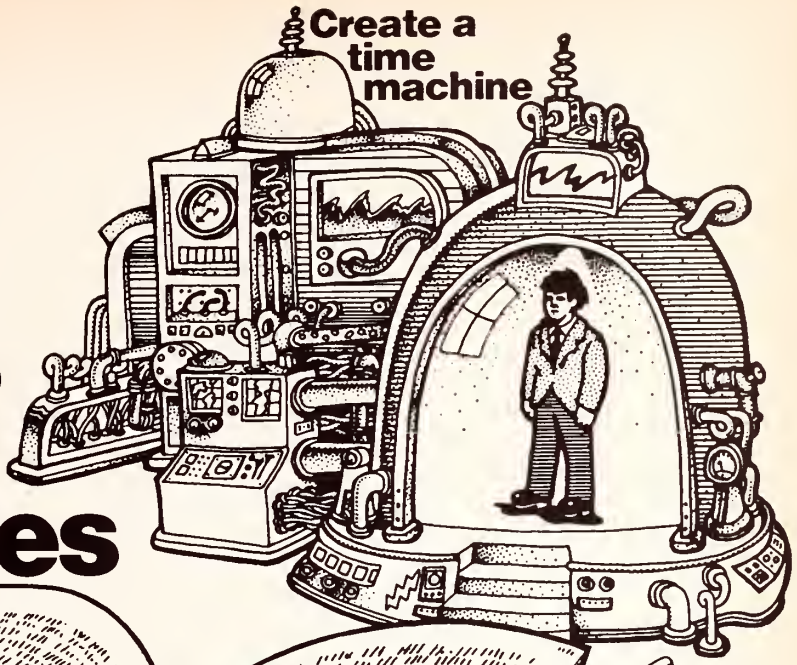
One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Informotion—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indicotions:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Controindicotions:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precoutions/Adverse Reoctions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

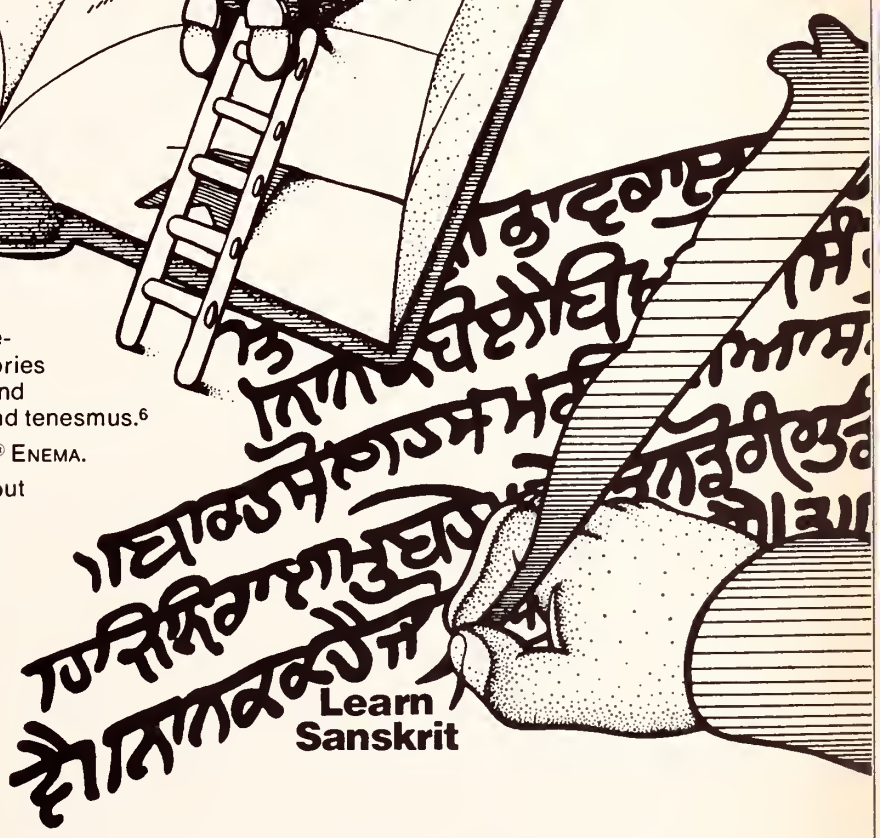
THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Quinamm™ Specific therapy for night leg cramps
(quinine sulfate 260 mg., aminophylline 195 mg.)

What to do until suppositories work:





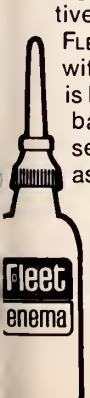


Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.

FLEET ENEMA. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.



C. B. FLEET CO., INC.
Lynchburg, Va. 24505

fleet
pharmaceuticals

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964

19471

Efudex®
(fluorouracil)
cream/solution

In the treatment of solar/actinic keratoses–
An alternative to cold, fire and steel

2/23/68
Before treatment with 5% 5-FU cream. Patient R. G., 78 years old, shows extensive skin changes due to weathering and severe solar/actinic keratoses.

3/26/68
Following one month of therapy. Intense erythematous reaction is seen at sites of keratoses. Normal skin has not reacted. Some areas which had reacted initially have undergone healing despite continued topical application of 5% 5-FU.

6/11/68
Ten weeks after discontinuance of therapy. All areas have healed completely. Residual mild erythema remains in some areas. This patient also had seborrheic keratoses which, as expected, have not reacted. There is no evidence of residual lesions or recurrences.



ROCHE
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Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

An alternative to conventional therapy

Efudex (fluorouracil) offers the physician a topical alternative to cryosurgery, electrodesiccation and cold-knife surgery in the treatment of solar/actinic keratoses. It is effective, comparatively inexpensive and especially well suited for treatment of these multiple lesions. Important, too, is the highly desirable cosmetic result. Clinical experience demonstrates that treatment with Efudex results in an extremely low incidence of scarring.*

Highly effective

In clinical trials, depending on the dosage form and strength used, complete involution occurred in 77 to 88 per cent of lesions following treatment. The rate of recurrence was low, ranging from 1.7 to 5.6 per cent up to a year after completion of therapy. When new lesions appeared, repeated courses of Efudex therapy proved effective.*

Predictable therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two or three months before gradually receding. Since this response is so predictable, lesions which do not respond should be biopsied.

Two strengths—two dosage forms

Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, two important considerations: First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann - La Roche Inc., Nutley, New Jersey.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

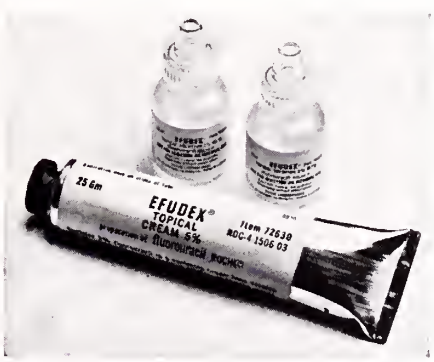
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Efudex Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing-cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



new
Efudex®
(fluorouracil)
cream/solution

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY
OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, music therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available

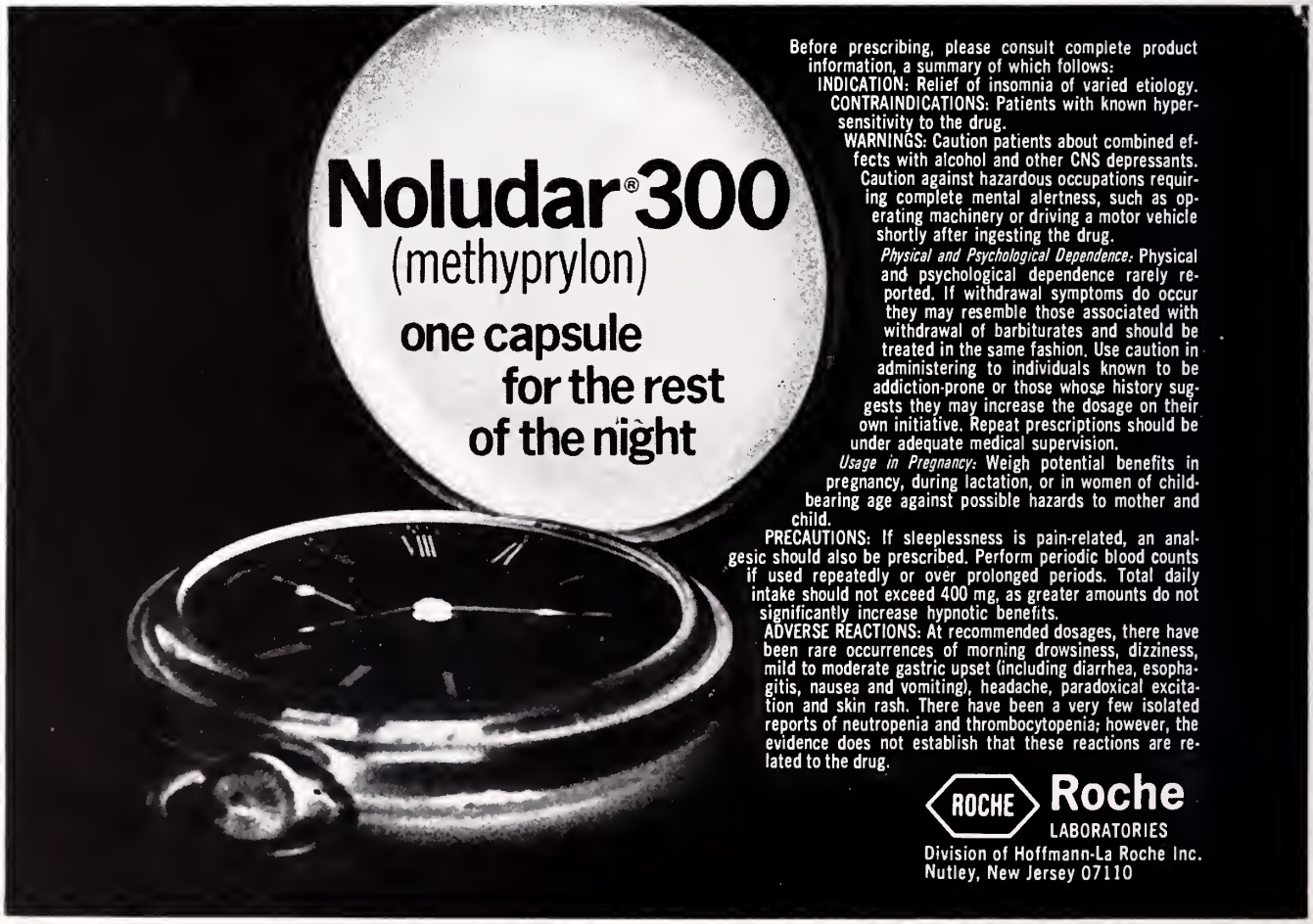
Contact: (1) Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

(2) Samuel N. Workman, M.D.
Chief of Clinical Services

(3) Charles W. Neville, Jr., M.D.
Associate Professor of Psychiatry
and Medical Director

Area Code 704-254-3201



Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

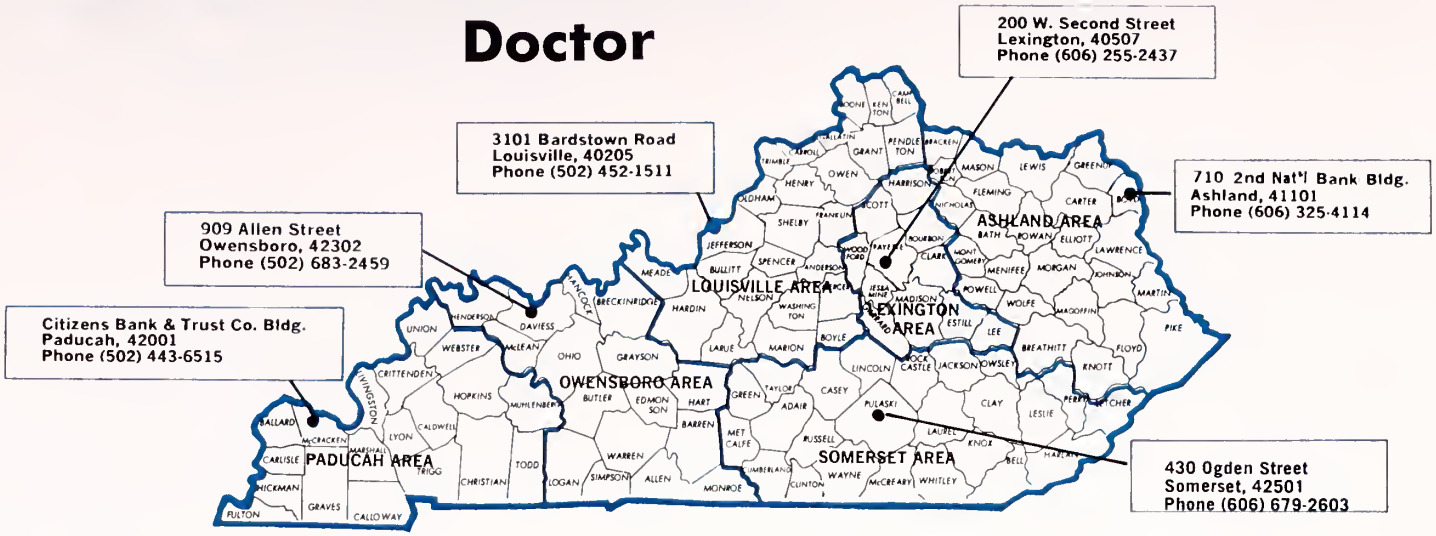
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

ROCHE Roche
LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

PROFESSIONAL RELATIONS REPRESENTATIVES

At Your Service, Doctor



FROM THESE

6 STRATEGICALLY LOCATED OFFICES . . .

BLUE CROSS® and BLUE SHIELD®′ Professional Relations Representatives are available to assist, whenever a physician or one of his staff needs information regarding claims handling, payments, benefits or any other point concerning Voluntary Prepaid Protection.

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Home Office

BLUE CROSS® and BLUE SHIELD®′

BLUE CROSS HOSPITAL PLAN, INC. KENTUCKY PHYSICIANS MUTUAL, INC.

3101 Bardstown Road Louisville, Ky. 40205 (502) 452-1511

If crying, withdrawal and frustration point to a depression,

Tofrānil®
imipramine hydrochloride USP

may point to relief.

Tofrānil is generally effective in a variety of depressive states.

Recovery or marked improvement is reported to occur in 70 to 85% of patients with endogenous depression.

Endogenous depressions are more likely to respond than other forms of depression.

Tofrānil is not indicated for "the blues" or any other short-term sadness that human beings are often heir to – and just as often quickly recover from.

So before prescribing, please consult the full prescribing information for proper patient selection, dosage, precautions, contraindications, and adverse reactions concerning this drug. It is summarized on the last page of this advertisement.

Now available on Public Assistance in Kentucky.


How do you diagnose a tear?
She often cries herself to sleep.
Has lost interest in everybody and everything – her friends, her family, her home.
"Nothing ever seems to go right", she tells you.



When depression comes to mind–

Tofrānil®

imipramine hydrochloride

Indication: Depressive states of diverse psychopathology.

Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of adverse effects can be serious or even fatal. An interval of at least 14 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed. The drug is also contraindicated (a) during the acute recovery period after myocardial infarction, (b) in patients with known hypersensitivity to the drug. Cross-sensitivity to other dibenzazepine compounds should be kept in mind.

Warnings: Usage in Pregnancy: Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:

- patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
- patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
- hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
- patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
- patients receiving guanethidine or similar agents since Tofrānil, brand of imipramine hydrochloride, may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

Since the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: It should be kept in mind that the possibility of suicide in seriously depressed patients is inherent in the illness and may persist until significant remission occurs. Such patients should be carefully supervised during the early phase of treatment with Tofrānil, brand of imipramine hydrochloride, and may require hospitalization. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, Tofrānil, brand of imipramine hydrochloride, may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine hydrochloride should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine hydrochloride with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential, since there is limited clinical experience.

Adverse Reactions: Note: Although the listing which follows includes a few adverse reactions which have not been reported with this specific drug, the pharmacological similarities among the tricyclic antidepressant drugs require that each of the reactions be considered when imipramine is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

How Supplied: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration.

(B)46-850-F

For complete details, including dosage, please refer to the full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TO-7773-9



The concert was just underway,
When to the conductor's dismay
Cramps and diarrhea,
Did so quickly appear,
The maestro no longer could stay.

Because diarrhea with cramping, nausea, and painful straining can strike at the most inopportune time, it takes a comprehensive agent to treat the total diarrheal syndrome and help get the patient back on the job. That's why so many physicians rely on Donnagel, especially during the fall and winter months when "flu" and viral gastroenteritis usually hit their peak.

Donnagel is much more than just a simple kaolin-pectin combination. It also contains the belladonna alkaloids to calm GI hypermotility and help relieve the distressing discomforts which so often accompany diarrhea. Certainly it's less expensive and more convenient than taking two medications. And the dosage is lower too. Available in the handy 4-oz. plastic bottle at pharmacies everywhere on your prescription or recommendation.



When diarrhea and its discomforts separate a man from his job . . .

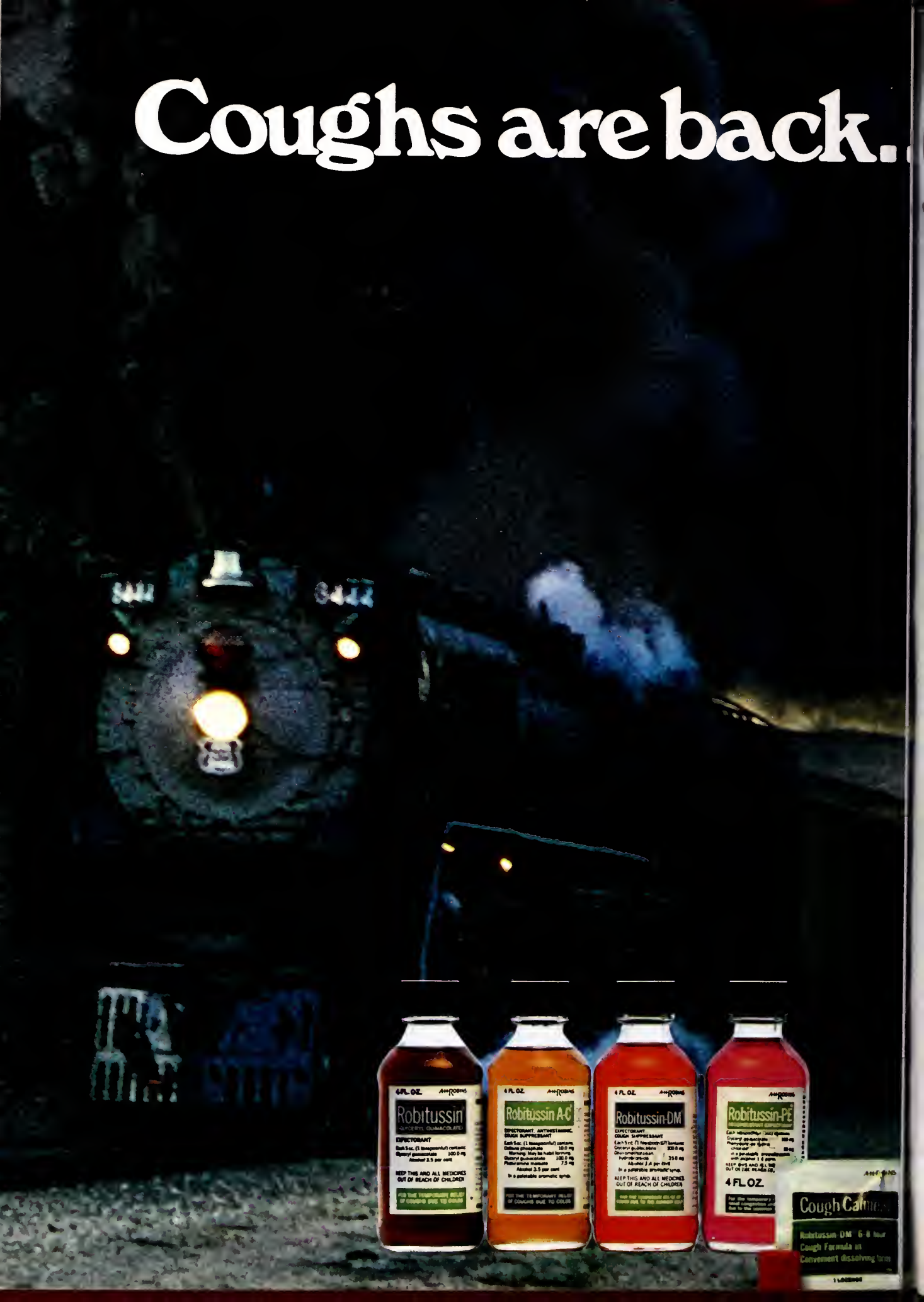
Donnagel®

Each fluid ounce contains: Kaolin, 6 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.; Atropine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Sodium benzoate (preservative), 60 mg.; Alcohol, 3.8%.

A·H·ROBINS

A. H. Robins Company,
1407 Cummings Drive,
Richmond, Va. 23220

Coughs are back..



clear the tract with the

Robitussin® Line

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

Robitussin®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Alcohol, 3.5%	

For unproductive allergic coughs

Robitussin A-C®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.
(warning: may be habit forming)	
Alcohol, 3.5%	

Non-narcotic for 6-8 hr. cough control

Robitussin-DM®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Dextromethorphan hydrobromide	15.0 mg.
Alcohol, 1.4%	

Clears sinuses and nasal stuffiness as it relieves cough

Robitussin-PE®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Phenylephrine hydrochloride	10.0 mg.
Alcohol, 1.4%	

Robitussin-DM in solid form for "coughs on the go"

Cough Calmers™

Each Cough Calmer contains:

Glyceryl guaiacolate	50.0 mg.
Dextromethorphan hydrobromide	7.5 mg.

Select the Robitussin® "Clear-Tract" Formulation That Treats Your Patient's Individual Coughing Needs:

Robitussin® extra benefit chart

All 5 Robitussins have an EXPECTORANT-DEMULCENT action. Keep this handy chart as a guide in selecting the formula that provides the *extra* benefits you want for your patient.

	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®					●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS™	AHR		AHR		AHR

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

Like you,

your County Society Secretary

is a busy man.

He will appreciate your

cooperation in

paying your

County,

KMA, and

AMA dues.

Due

January 1, 1971

Delinquent

April 1, 1971

Kentucky

Medical Association

New Nilcol-
A Comprehensive
Formula:

DESCRIPTION	Contents in mg Tablet	Elixir— each 15 ml
phenylproponolamine HCl	50	25
chlarpheniramine maleate	4	2
glyceryl guaiacalate	200	100
dextromethorphon HBr	30	15
alcohol		10%

The scared, elliptical tablet is light violet. The elixir is deep violet in colar and grape-flavared.

ACTIONS Each camponent af Nilcol has been selected to provide symptamotic relief of congestion and cough in upper respiratory disorders.

Phenylpropanolomine hydrochloride is o vasoconstrictor which reduces congestion af the nasapharyngeal mucosa. Chlorpheniramine maleate, a widely used antihistomine, helps to control allergic symptoms. The expectoront is glyceryl guaiacolate which helps ta increase the secretion and decrease the viscosity of fluids of the respiratory tract. Dextrametharphan is a well-knawn, centrolly acting antitussive. Nilcol may minimize the need for tapical decangestants.

INDICATIONS Nilcal is indicated for nasol and bronchial cangestion; coughs ond other symptoms of respiratory infections including influenza and the cammon cold; other respiratory conditians such as sinusitis, ollergic rhinitis or hoy fever.

CONTRAINDICATION Hypersensitivity ta any ingredient.

PRECAUTIONS Because of the possibility af drawsiness, patients should be cautioned against driving ond operating machinery. Administer with caution to patients with hyperthyraidism, hypertensive cardiavascular disease, diabetes mellitus and liver disease. Use in pregnancy is not recammended.

ADVERSE REACTIONS Anxiety, restlessness, tension, insomnio, tremor, weakness, headache, vertigo, sweating, nouseo, ond vomiting may possibly occur.

SUPPLIED Toblets in bottles of 100. Elixir in bottles of 32 fl oz (1 qt) with dosoge cups. N-GP-11-4C

WARNER-CHILCOTT
Morris Ploins, New Jersey 07950

This is a test of this publication's advertising "Exposure." Please see below.

Introducing The Fully Therapeutic "Age-Calibrated" Non-Narcotic Cough/Cold Formula... For Any Member Of The Family*

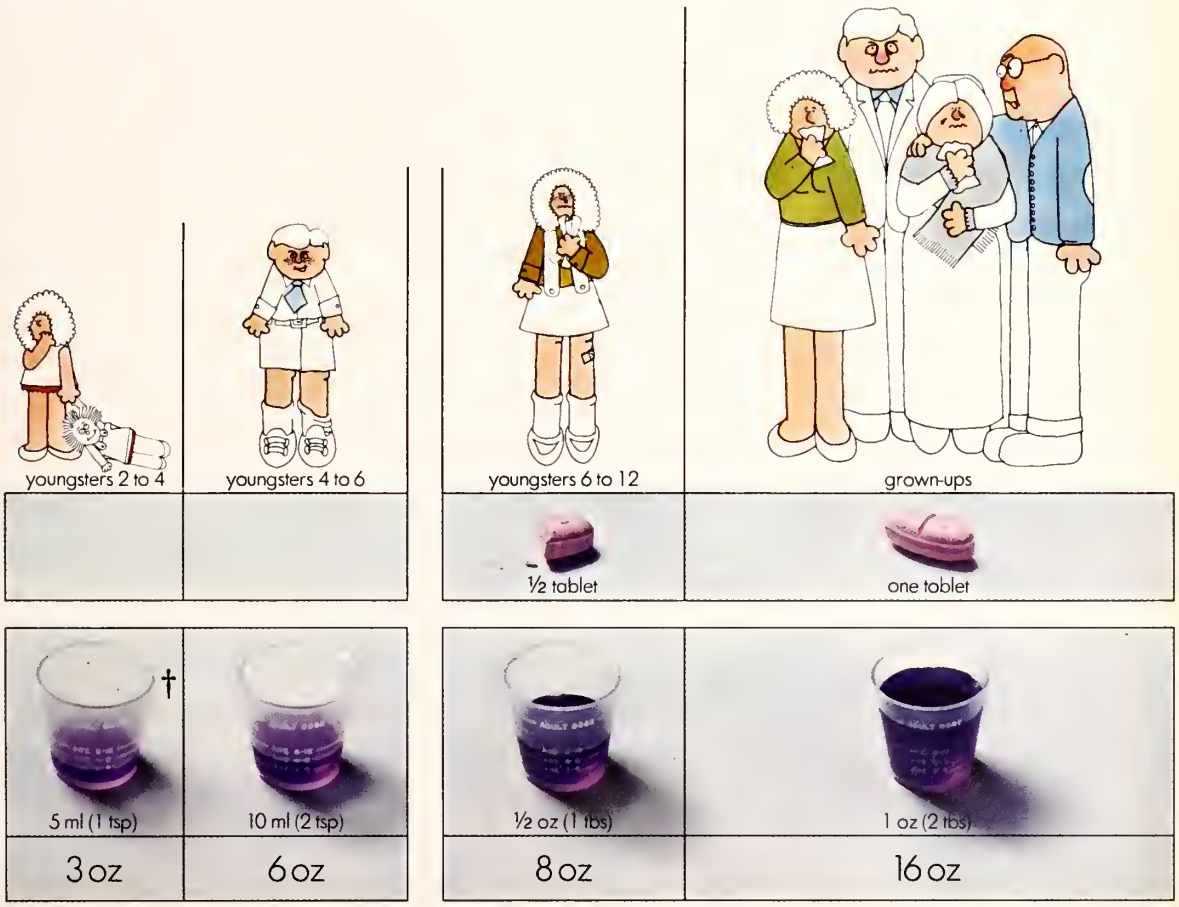
*Not for infants under 2 years of age.

New Nilcol™ Rx Tablets/Elixir

Each scored tablet contains: Phenylproponalamine HCl 50 mg, Chlorpheniramine maleate 4 mg, Glyceryl guaiacalate 200 mg, Dextramethorphan HBr 30 mg.
Each 15 ml of elixir contains: Phenylproponolomine HCl 25 mg, Chlorpheniramine maleate 2 mg, Glyceryl guaiacalate 100 mg, Dextramethorphan HBr 15 mg, alcahal 10%.

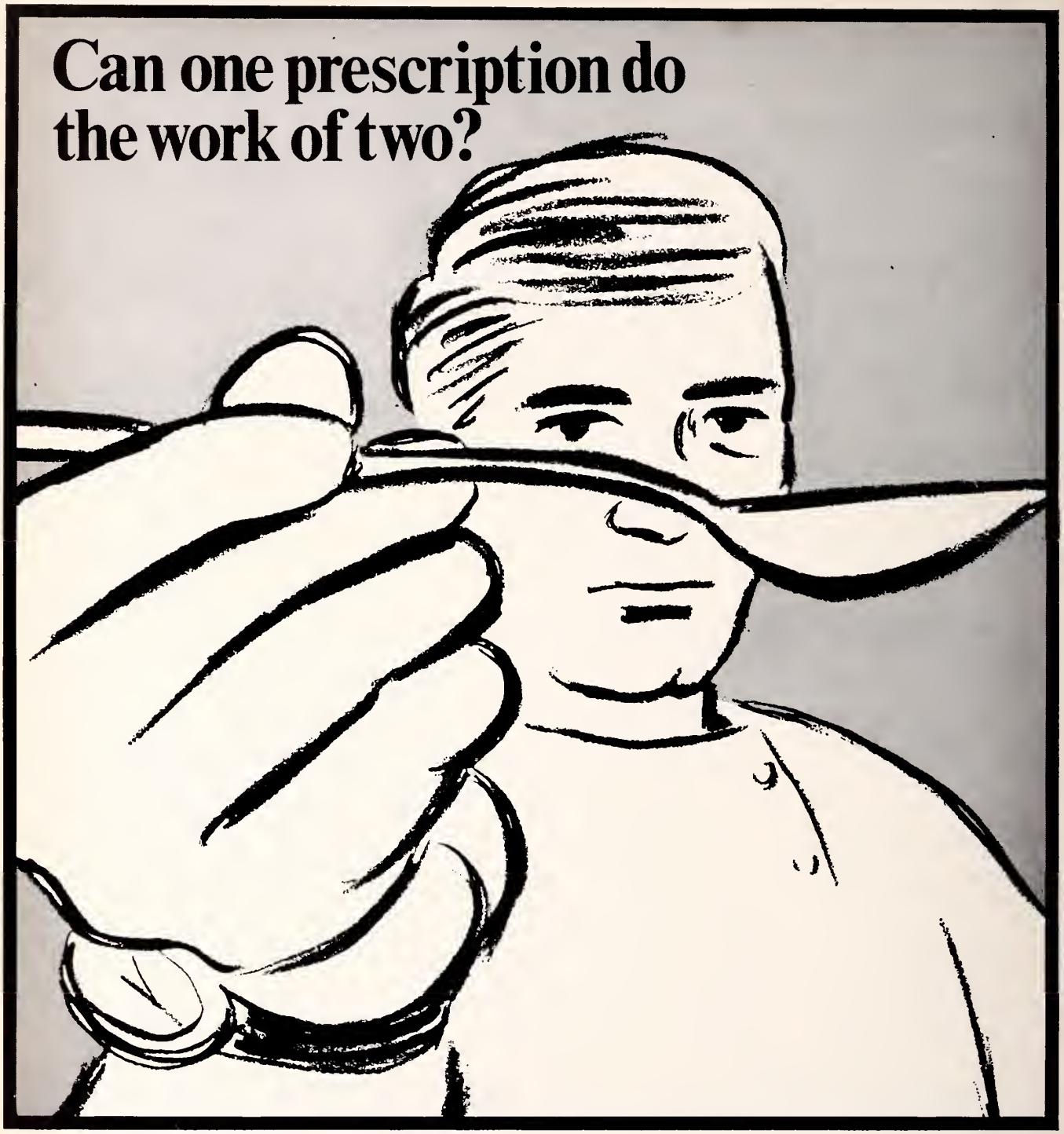
An Expectorant • An Antihistamine A Decongestant • A Non-Narcotic Antitussive

For a complimentary package, send your Rx with the name Nilcol written on it to: Warner-Chilcott Laboratories, 201 Tabor Road, Morris Plains, New Jersey 07950. Att: M. Adams, St.J.



†Plus "Age-Colibrated" Medicine Cup for Precision-Assured Dosage.

Can one prescription do the work of two?



Yes, Kolantyl.®

Kolantyl Gel/Wafers contain
aluminum hydroxide/magnesium hydroxide, and
Bentyl® (dicyclomine hydrochloride) too.

Merrell
The Wm. S. Merrell Company
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

0-2572 (21721

A
BUILDING BLOCK
TO RECOVERY



Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

The causes of vaginitis are multiple



Trichomonads... monilia... bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (aminacrine hydrachloride 0.2%, sulfanilamide 15.0%, allantain 2.0%)

Suppositories (aminacrine hydrachloride 0.014 Gm., sulfanilamide 1.05 Gm., allantain 0.14 Gm.)

Cantraindicatians: Known sensitivity to sulfanamides.
Precautians/Adverse Reactions: The usual precautions for topical and systemic sulfonamides should be observed because of the possibility of absarption. Burning, increased local discomfort, skin rash, urticaria or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dasage: One applicatorful or one suppository intravaginolly once or twice daily.
Supplied: Cream – Four-ounce tube with or without applicator. Suppositories – Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular

When Preventing Constipation is a Concern . . .



Consider

SURFAK®

dioctyl calcium sulfosuccinate

(stool softener)

Surfak prevents constipation:

- **naturally**
 - . . . without bowel distention
 - . . . without adding sodium to the system
 - . . . without requiring unusual intake of water
- **conveniently**—one 240 mg. capsule per day
- **economically**—costs less per effective daily dose*

Supplied: Bottles of 15, 100 (FSN 6505-926-8844) and 1000 (FSN 6505-890-1627) and Unit Dose 100's (10 x 10 strips).

*based on actual drug store survey of prescribed dosages

HOECHST
PHARMACEUTICAL CO.
Somerville, N.J. 08876 U.S.A.

C-166

in cardiac edema

Dyazide®

Trademark

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

SK&F

SK&F Co., Carolina, P.R. 00630
a subsidiary of Smith Kline & French Laboratories

DZ-108



Fast...long-lasting relief of aches and pains of colds and flu

with the unique timed-release aspirin

Double strength Measurin timed-release aspirin offers a new kind of control for your patients with cold and flu discomforts. In each 10-grain tablet are over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means fast relief of symptoms, followed by hours of comfort. Throughout the day, Measurin gives your patients freedom from a 4-hour aspirin schedule. During the night, its 8-hour dosage schedule holds the promise of sound sleep without awakening to take extra tablets.

For Professional Samples write:
Breon Laboratories Inc.
Sample Fulfillment Division
P.O. Box 141
Fairview, N.J. 07022

BREON

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Subsidiary of Sterling Drug Inc.

MEASURIN®
TIMED-RELEASE ASPIRIN

ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF

Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief, 2 tablets at bedtime.

Available: Bottles of 12, 36 and 60 tablets.



When disease is ruled out and psychic tension is implicated

Valium® (diazepam) helps relax the patient and relieve his somatic symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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April 15-16
Cave City

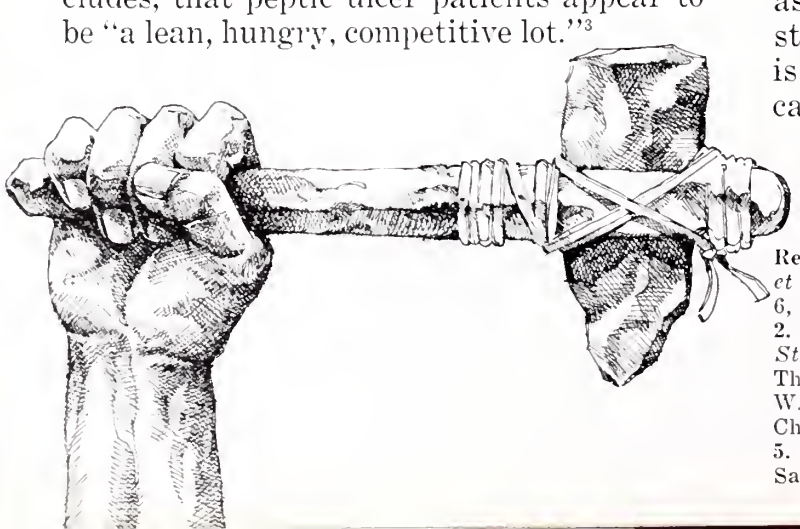
IF MORE MEN CRIED



At least seventy-five out of one hundred adults with duodenal ulcers are men.[1] Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."[2]

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."[2]

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."[3]



Big boys don't cry. If more men cried, maybe fewer would wind up with duodenal ulcers. But men will be men—the sum total of their genes and what they are taught. Schottstaedt observes that when a mother admonishes her son who has hurt himself that big boys don't cry, she is teaching him stoicism.[4] Crying is the negation of everything society thinks of as manly. A boy starts defending his manhood at an early age.

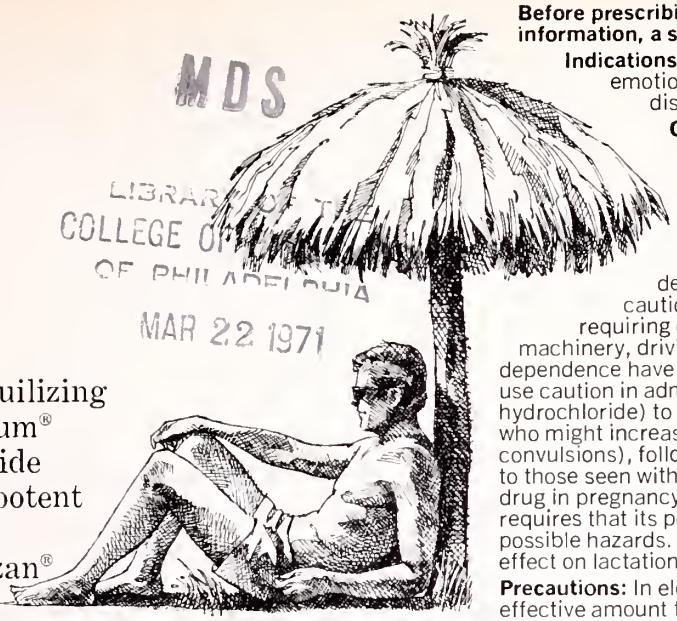


Take away stress, you can take away symptoms. There is no question that stress plays a role in the etiology of duodenal ulcer. Alvarez[5] observes that many a man with an ulcer loses his symptoms the day he shuts up the office and starts out on a vacation. The problem is, the type of man likely to have an ulcer is the type least likely to take long vacations or take it easy at work.

The rest cure vs. the two-way action of Librax.® For most patients, the rest cure is as unrealistic as it is desirable. Still, the stress factor must be dealt with. And here is where the dual action of adjunctive Librax can help. Librax is the only drug that com-

References: 1. Silen, W.: "Peptic Ulcer," in Wintrobe, M. M., *et al.* (eds.): *Harrison's Principles of Internal Medicine*, ed. 6, New York, McGraw-Hill Book Company, 1970, p. 1444. 2. Wolf, S., and Goodell, H. (eds.): *Harold G. Wolff's Stress and Disease*, ed. 2, Springfield, Ill., Charles C Thomas, 1968, pp. 68-69. 3. *Ibid.*, p. 257. 4. Schottstaedt, W. W.: *Psychophysiologic Approach in Medical Practice*, Chicago, Ill., The Year Book Publishers, Inc., 1960, p. 163. 5. Alvarez, W. C.: *The Neuroses*, Philadelphia, Pa., W. B. Saunders Company, 1951, p. 384.

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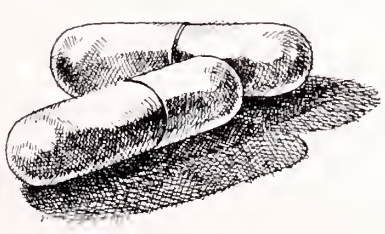


bines the tranquilizing action of Librium® (chlordiazepoxide HCl) with the potent anticholinergic action of Quarzan® (clidinium Br).

Protects man from his own hungry personality. The action of Librium reduces anxiety—helps protect the vulnerable patient from the psychological overreaction to stress that clutches his stomach. At the same time, the action of Quarzan helps quiet the hyperactive gut, decreasing hypermotility and hypersecretion.

An inner healing environment with 1 or 2 capsules, 3 or 4 times daily. Of course, there's more to the treatment of duodenal ulcer than a prescription for Librax. The patient—with your guidance—will have to adjust to a different pattern of living if treatment is to succeed. During this adjustment period, 1 or 2 capsules of Librax 3 or 4 times daily can help establish a desirable environment for healing.

Librax: It can't change man's nature. But it can usually make it easier for men to cope with the discomfort of stress—both psychic and gastric—that can precipitate and exacerbate duodenal ulcer.
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

in the treatment of duodenal ulcer adjunctive

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Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

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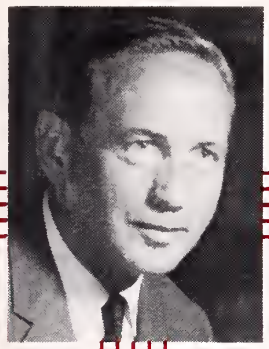
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MESSAGE FROM THE PRESIDENT



WHETHER we agree or disagree with its necessity or its advisability, the patterns of the practice of medicine are changing. The combined forces of patient needs and desires, the technical advances in every field of medicine, the concerned suggestions of legislators and politicians, the varied interests of insurance organizations, and the often changing concepts of physicians themselves, as to the appropriate method of providing services, are among the influences in these changes.

In spite of our own interest in maintenance of our economic status and in the relative convenience of certain procedures in medical practice, important as these are, we must continue to let it be known that our primary concern remains that of providing the best care for our patients of which we are capable. When decisions are faced, the criterion of whether it is best for the patient will often help to decide which structure of organization, which rule, which steps of action, we will follow.

The factors from which we derive our satisfaction in the practice of medicine include having work which needs to be done, being able to follow that work with vigor along the course of patient needs, the close personal relationships which are involved in such service, and the coveted extra bonus of an improved and appreciative patient.

If we encourage the change in medical practice to be directed toward the best service to the patient and the preservation of these components of medical practice from which we derive our really lasting satisfaction, then we shall have no need to apologize to our current society or to our succeeding generations, nor to hesitate to encourage our children to follow in our footsteps. On this basis, we must stand firmly and boldly in support of, or in opposition to, those who would direct our course of action.

Richard F. Price M.D

VICE-PRESIDENT, KENTUCKY MEDICAL ASSOCIATION

This is the second in a series of articles written at the request of KMA President John C. Quertermous, M.D.

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

MARCH

11-13 17th Annual Symposium on Cardiovascular Diseases, Heart Association, University of Louisville School of Medicine, KAGP, Stouffer's Louisville Inn, Louisville

12 Symposium for emergency room and operating room nurses, in conjunction with Annual Meeting, Kentucky Chapter, American College of Surgeons, Health Sciences Center, University of Louisville

12-13 Annual Meeting, The Kentucky Chapter, American College of Surgeons, Health Sciences Center, University of Louisville

29 PANMED television series, "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

APRIL

1 Annual Meeting, Kentucky Industrial Medical Association, Ramada Inn, I-64 and Hurstbourne Lane, Louisville

1 16th Annual Spring Clinical Conference, Lexington Clinic, Symposium on Infectious Diseases, Lexington

8-10 Annual Meeting, Kentucky Obstetrical and Gynecological Society; theme "Perinatal Problems," Ramada Inn, Lexington

9-10 Postgraduate course, "Obstetrical Analgesia—Anesthesia and Neonatology," a review of the means of providing safe and satisfactory analgesia for the women in labor with either normal or complicated conditions of delivery; fee $40. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

15-16 KMA Interim Meeting, Holiday Inn Motel, Cave City

22 Postgraduate symposium on rheumatic diseases, "Advances in Rheumatology," sponsored by the University of Louisville School of Medicine and The Kentucky Arthritis Foundation; Health Sciences Center, University of Louisville; no registration fee; six accredited hours, American Academy of General Practice

26 PANMED television series, "Immediate Post Operative Fitting of the Amputee," KET 10:30 p.m. EST (9:30 p.m. CST)

28-30 Symposium on Inflammatory Diseases of the Gastrointestinal and Biliary Tracts, Albert B. Chandler Medical Center, Lexington. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

MAY

12-13 Spring Meeting, Kentucky Chapter, American Academy of Pediatrics, Ashland

14 Postgraduate course, "New Approaches in Cancer Therapy," a symposium designed to explore those areas of cancer therapy where new approaches have significantly altered treatment; fee $25. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

19-21 Postgraduate course, "Ambulatory Care of Children," for professionals who care for children; fee $75. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

24 PANMED television series, "The Transient Ischemic Attack," KET 10:30 p.m. EST (9:30 p.m. CST)

31 PANMED television series, "Physical Fitness and the Athlete," KET 10:30 p.m. EST (9:30 p.m. CST)

IN SURROUNDING STATES

MARCH

10-11 Postgraduate Course, "Advances in Urology," Cleveland Clinic Educational Foundation, Cleveland, Ohio

17-18 Postgraduate course, "Blood Banking," Cleveland Clinic Educational Foundation, Cleveland, Ohio

24-25 Postgraduate course, "Medical Progress and Its Relationship to Dentistry," Cleveland Clinic Educational Foundation, Cleveland, Ohio

25-26 National Conference on Rural Health, "Community Health Programs for Tomorrow," American Medical Association, Atlanta, Georgia

31-April 1 Postgraduate course, "Updating Neurology," Cleveland Clinic Educational Foundation, Cleveland, Ohio



THE INSURANCE PAGE



Are Medical Foundations the Answer?

THE writer does not have an answer to this question. He intends to pose new questions for the mind of the inquiring physician.

Over the the past few years numerous medical foundations, or non-profit cooperations, have been set up by county medical societies or similar groups. The purposes of these foundations have been varied, but generally involve peer review and distribution of funds from third party to physicians.

Recently the Iowa Medical Society, in a special session of their House of Delegates, voted 62-28 to create a foundation to design, promote, and monitor prepaid medical programs. The vote followed a series of 16 regional meetings throughout the State, sponsored by the Medical Society, to explain the foundation concept.

The Iowa House of Delegates ordered the Board of Trustees to begin work on necessary organizational documents to be presented to the House during the next scheduled meeting in April.

The *American Medical News* stated that J. H. Sunderbruch, M.D., President of the Iowa State Medical Society, stressed that the foundation appears to be the type of "instrument" through which organized medicine can engage the forces of change and exert positive leadership in shaping future medical care delivery systems.

In Kentucky, the House of Delegates has requested the Trustees to begin study of the foundation principle. It is well that individual members of the Kentucky Medical Association begin a study of this subject, so that they may be well informed.

In some circles the medical foundation is hailed as the individual practitioner's answer to the closed panel prepaid group plans.

In some locations there has been a tendency for government programs to turn over a fixed amount of money which was determined by limitation in the state budget. This fixed amount of money was then prorated to the various physicians on a percentile basis.

One wonders about the effect which medical foundations will have on the existing Blue Plans. One wonders also if the government agencies will not have the tendency to present the foundation with a fixed amount of money, encourage the beneficiaries to seek comprehensive health care in ever-increasing numbers, and leave the foundation to adjust the percentile of payment downward as the cost of living increases.

LEWIS DICKINSON, M.D.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 5-69. This twenty-three year old married, white, gravida 1, para 0, had an expected delivery date of the 8th of May. She had been under the care of a physician and watched closely, since she had a diagnosis of tetralogy of Fallot. She gained 14 pounds during her prenatal course. She did well, but did not follow her physician's suggestions regarding her diet and weight gain. At one time she gained nine pounds in two days and had four plus pedal edema.

She consistently had albuminuria and bacturia, despite antibiotic therapy. She had been treated for subacute bacterial endocarditis in 1954, and had been advised never to over exert herself and not to get pregnant. The patient had an identical twin sister and apparently tried to do what her healthy sister was able to do.

The patient was admitted in possible labor on May 9, 1969, at 10 p.m. Blood pressure at that time was 160/110; she had been in bed for two weeks previously, in an attempt to control her toxemia of pregnancy. Fetal heart was good, 144. Hemoglobin was 17 grams per cent.

The patient was seen by an internist, given nasal oxygen, 50 mg. of meperidine HCL, and 12.5 mg. promethazine HCL IM at 8 p.m. She was digitalized. There was cyanosis of the nailbeds and clubbing of the fingers, which had been present for some time. She made steady progress and delivered a five-pound, twelve-ounce girl under caudal continuous anesthesia, using low forceps, at 10:15 p.m., May 10, 1969. The baby had a Apgar of eight; it was somewhat sluggish, but did respond well.

The patient was maintained on nasal oxygen, and sandbags were placed on the abdomen. Meperidine HCL was required to reduce the cyanosis and the discomfort the patient complained of. The next day the patient was seen by a consultant; urinary output was low and she was hypertensive, anemic, and had albuminuria. Her BUN was 30 mg. per cent.

At 10 a.m. on the 11th she had 50 cc of Manitol IV, and the next hour had a urinary output of 115 cc. The urine when examined by the consultant showed a specific gravity of 1.008, albumin two plus; the microscopic showed granular and waxy casts. There was no edema of the ankles. She had a gallop rhythm. There was a Grade II to III systolic murmur heard at the left sternal border, which was audible in the back.

IMPRESSION: Tetralogy of Fallot
Possible Chronic Pyelonephritis

The recommendation was continued nasal oxygen, digitalis, diuretics, and chemotherapy for pyelonephritis. Blood pressure was normal. The prognosis was considered guarded.

On the 12th, her blood pressure was 130/80 and her pulse was 84, respirations 20; lungs were clear; she had 1800 cc urinary output in the last twenty hours. On the 13th, she had a temperature of 101; she had some diarrhea; lungs were clear; bowel sounds were normal. She was afebrile on the 14th, but still had some diarrhea. She had no complaints the 15th. Chest was clear; no gallop rhythm was heard. She was afebrile and was discharged from the hospital the 16th. Two weeks postpartum, at 2:03 p.m., on the 25th of June, she was brought to the hospital, dead on arrival. No autopsy was obtained.

Comment

The Committee classified this death as an indirect obstetrical one. A possible preventable factor might have been the fact that adequate contraceptive information was not given or a sterilization procedure not carried out. Since an autopsy was not obtained, one can only speculate as to the cause of death. She may have suffered a cardiac arrhythmia, an overwhelming infection such as pneumonia, pulmonary embolus, or other complications that might have caused death.

Cardiac disease during pregnancy has become a significant cause of maternal mortality, as other conditions contributing to maternal deaths have been brought under control. In a report by Jones and Howitt,[1] 71 cases of Fallot's tetralogy were collected. There were three deaths in these 71 cases, giving a maternal mortality of 4.2 per cent. A report by Cannell and Vernon,[2] concerning congenital heart disease in pregnancy, states that in many clinics, cardiac complications are the third most frequent and in some the foremost cause of maternal

death. They contribute to a high fetal wastage, according to the severity of the disease. In their reported series of 312 pregnancies in 258 patients with heart disease, 53 patients were victims of congenital heart disease. Obstructive lesions of the aortic valve and coarctation of the aorta had serious medical or obstetrical sequelae. Three remote maternal deaths in this series occurred in this group. They stated that the patients in this series were those with less severe lesions; and they surmised that those with serious impairment did not survive the child-bearing age, or if they did, they did not have children. Thus the good maternal results reported.

In a study at the Johns Hopkins Hospital, Barnes[3] states that if mean birth weight is considered, it is found that virtually all infants born to mothers with a cyanosis-producing cardiac anomaly weighed less than the mean without regard for the duration of pregnancy; thus these infants are examples of intrauterine growth retardation. In 54 pregnancies divided according to hematocrit the following was found. In 12 pregnancies in which the maternal hematocrit was over 60% (hemoglobin over 19), 10 ended in spontaneous abortions and in two, premature infants were born, with only one of the 12 pregnancies yielding a living infant. In the group with a hematocrit between 48 to 60% (hemoglobin 15 to 18), 16 pregnancies produced six abortions, nine premature infants, and one term infant (2,504 grams); seven of these survived. When the hematocrit was below 48% (hemoglobin less than 15), four pregnancies ended in abortion, 11 in premature infants, and 11 in term infants, with a total of 20 surviving children. Other excellent studies of this high risk group have been carried out by Burwell and Metcalfe[4] and Mendelson.[5]

References

1. Jones, A. M. and Howitt, G.: Eisenmenger Syndrome in Pregnancy, *Brit. Med. J.*, June, 1965.

2. Connell, D. E. and Vernon, C. P.: Congenital Heart Disease In Pregnancy, *Am. J. Obst. & Gynaec.* 85:744, 1963.

3. Barnes, A. C.: Discussion of Paper by Connell and Vernon, *Am. J. Obst. & Gynaec.* 85:749, 1963.

4. Burwell, C. S. and Metcalfe, J.: *Heart Disease and Pregnancy,* Boston, 1958, Little Brown & Co.

5. Mendelson, C. L.: *Cardiac Disease in Pregnancy,* Philadelphia, 1960, F. A. Davis Co.

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Brief Summary of Prescribing Information— 9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

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When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

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Such as the time when a penicillin-sensitive patient presents the potential for a severe allergic reaction.

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See next page for brief summary, listing indicated organisms, precautions, etc.

Erythrocin®

(ERYTHROMYCIN, ABBOTT)

Brief Summary

Indications

Erythrocin is indicated against gram-positive cocci — staphylococci (most strains), pneumococci and streptococci (including enterococci). Active against other pathogens, such as *Corynebacterium, Hemophilus, Clostridium, Neisseria,* and *Treponema pallidum,* the agents causing trachoma and lymphogranuloma venereum and primary atypical pneumonia caused by *Mycoplasma pneumoniae* (Eaton agent). Establish susceptibility of pathogenic organism when practical. Maintain therapeutic levels for ten days in the treatment of streptococcal infections to help prevent rheumatic fever and glomerulonephritis. Also consider local measures or surgery whenever indicated.

Contraindications

Known hypersensitivity to erythromycin. I.M. preparation also contraindicated in patients hypersensitive to the "caine" type of local anesthetics.

Precautions, Side Effects

Occasionally abdominal discomfort, cramping, nausea or vomiting may occur; generally controlled by reduction of dosage. Mild allergic reactions, such as urticaria and other skin rashes, may occur. Serious allergic reactions have been extremely infrequent; if hypersensitivity is encountered consider appropriate countermeasures, e.g., epinephrine, steroids, etc., and withdraw drug. The rare possibility of overgrowth of nonsusceptible organisms should be kept in mind; if it occurs withdraw drug and institute appropriate treatment. Local venous discomfort, generally mild, may occur with I.V. administration. I.M. preparation is suitable for deep intramuscular administration only; restrict use in children with small muscle mass. A mild transient local discomfort sometimes occurs following rectal insertion of Erythrocin Suppositories; discontinue if significant discomfort persists.

Administration and Dosage

I. ORAL: In adults with mild to moderate infections caused by readily-susceptible organisms 1.0 Gm. daily; more severe infections or those caused by less susceptible organisms 2.0 Grams daily; unusually severe infections up to 4 or more Gm./day. Daily dose in children is 15 to 25 mg./lb./day depending upon severity of infection. Daily dose should be administered in divided doses at 4-to-6 hour intervals. Continue treatment for at least 48 hours after symptoms have subsided and temperature has returned to normal. In fulminating or life-threatening infections, a parenteral form of erythromycin is preferred.

II. PARENTERAL: Intravenous administration may be continuous or intermittent (6 to 8 hour intervals); 1 to 4 Gm. daily in adults; 15 to 25 mg./lb./day in children, depending upon severity of infection. Recommended I.M. dose is 100 mg. (2 ml.) for adults, 50 mg. (1 ml.) for children 30 lbs. or more and 1.4 to 1.8 mg./lb. in smaller children. Injections are usually given at 6 to 8 hour intervals; may be given at 4 to 6 hour intervals for severe infections.

III. RECTAL: Following therapeutic doses are recommended in children: to 20 lbs., 1-125 mg. suppository every 8 hours; 20 to 40 lbs., 1-125 mg. suppository every 6 hours.

Change to oral therapy as soon as practicable.

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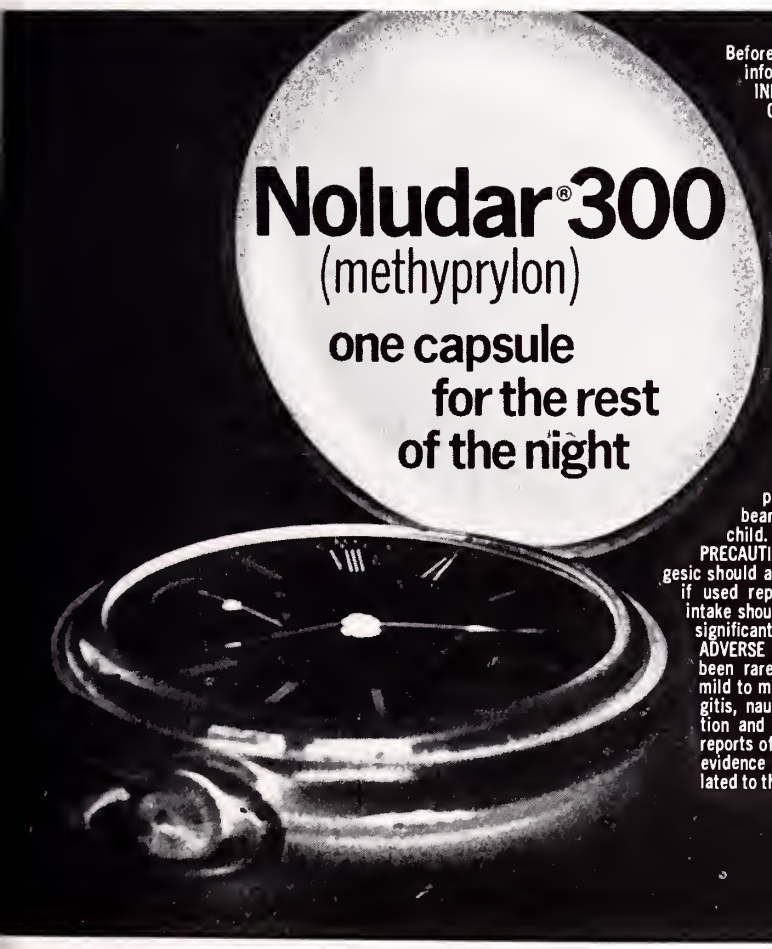
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or

(2) Samuel N. Workman, M.D.
Chief of Clinical Services

(3) Charles W. Neville, Jr., M.D.
Associate Professor of Psychiatry
and Medical Director

Area Code 704-254-3201



Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

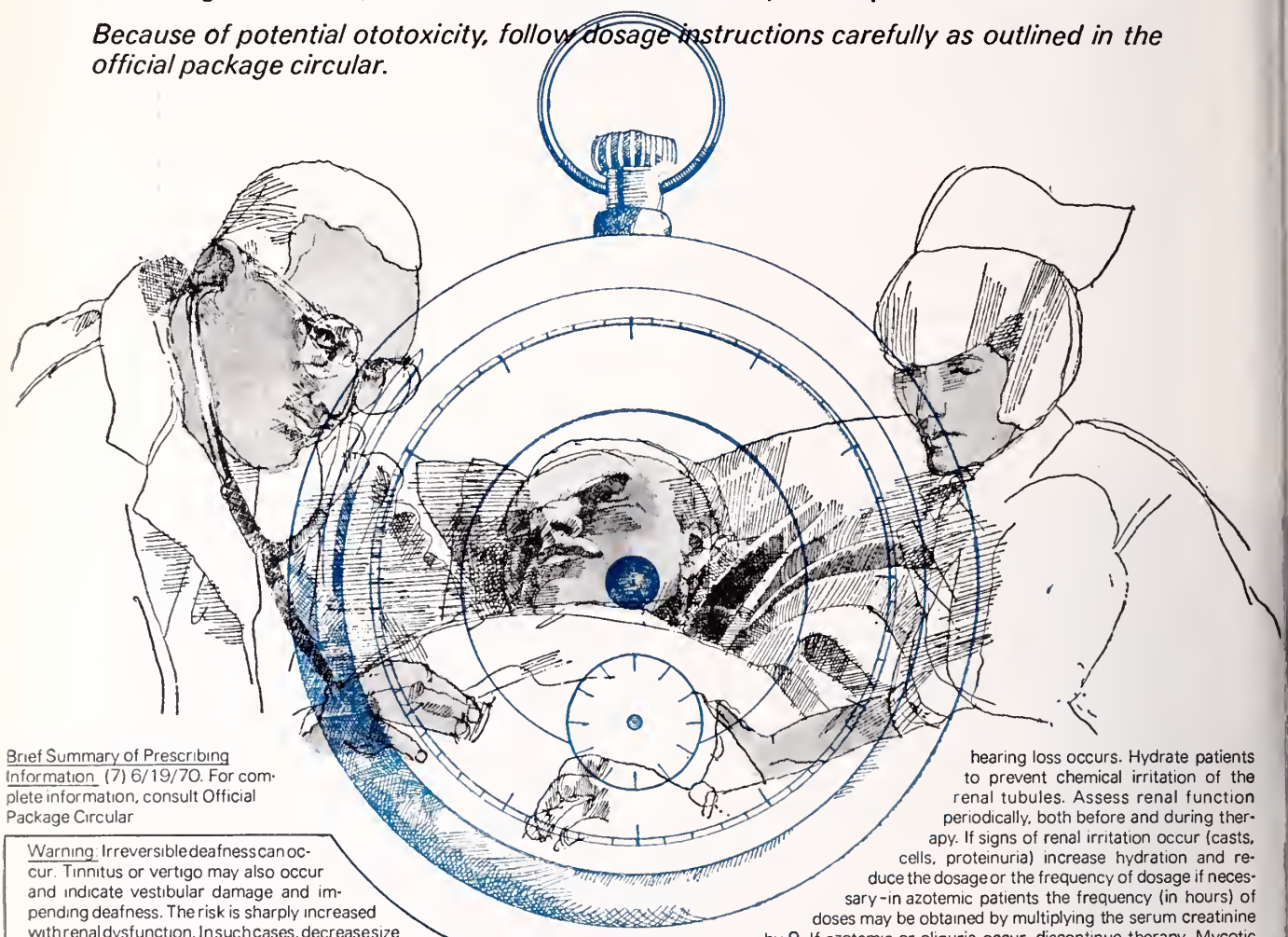
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Because of potential ototoxicity, follow dosage instructions carefully as outlined in the official package circular.



Brief Summary of Prescribing Information (7) 6/19/70. For complete information, consult Official Package Circular

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established.

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *A. aerogenes, K. pneumoniae, Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.

Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective alternative therapy is available.

Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary—in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.

Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.

Dosage and Administration: The maximum total daily dose should not exceed 1.5 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours. If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.

Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available—Pediatric Injection 75 mg. in 2 ml.

A.H.F.S. Category 8:12.28

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INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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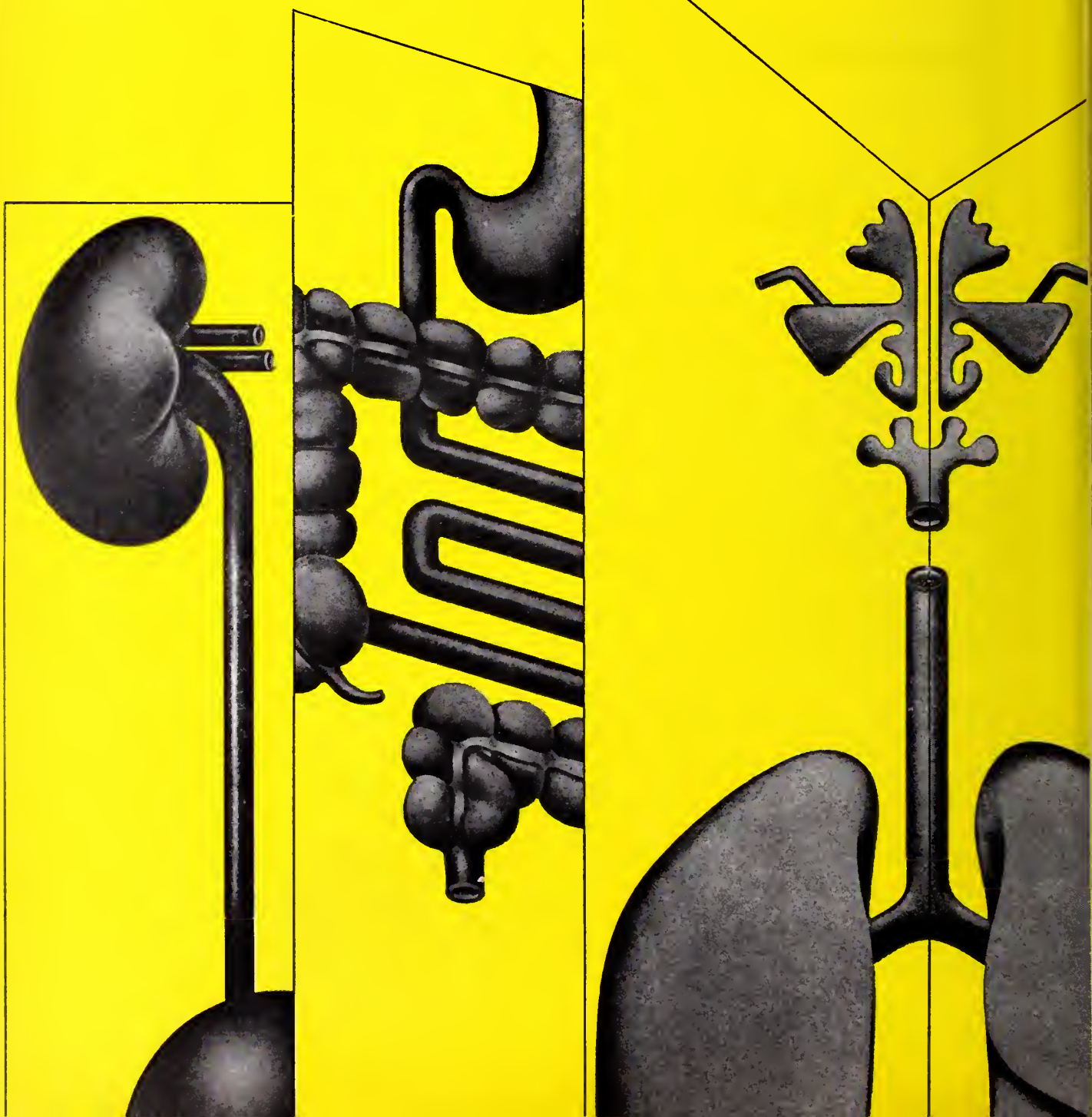
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(500mg. tetracycline phosphate complex)

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(3) 4/2/70

Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms. In staphylococcal infections, indicated surgical procedures should be performed.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary during prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a minimum of 4 months.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.

Usual Adult Dose: One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules–250 mg. in bottles of 16 and 100. bidCAPS–500 mg. in bottles of 16 and 50.

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VOLUME 69 MARCH 1971 No. 3

Permanent Cardiac Pacemakers: A Review of 128 Patients

ALLAN M. LANSING, M. D., Ph.D., F.R.C.S.(C)*

Louisville, Kentucky

The insertion of a modern cardiac pacemaker can be accomplished with minimal risk and morbidity, thus making this the treatment of choice for symptomatic patients of all ages.

THE treatment of heart block by cardiac pacemakers at the University of Louisville up to September 30, 1967, was previously reported in this journal.[1] A more extensive experience with this method of treatment of cardiac arrhythmias in the next three years to September 30, 1970, is now available. Permanent pacemakers have been implanted in 128 patients (Table I), 34 in the first two years, and 94 in the last three. These patients were treated at Jewish Hospital, Children's Hospital, Louisville General Hospital, and the Veterans Administration Hospital.

The indications for pacemaker implantation are listed in Table II. Complete heart block was the commonest reason for a permanent pacemaker, but frequently sinus bradycardia or intermittent second and third degree heart block was treated, even though the patient might have a normal sinus rhythm with a satisfactory ventricular rate most of the time.

Tachyarrhythmia associated with severe coronary artery disease was the indication in three patients, and postoperative heart block following repair of a congenital heart defect was present in six. Complete heart block accompanying acute myocardial infarction was usually treated by temporary transvenous pacing, but on six occasions a permanent unit had to be implanted. Two patients, one with an ostium primum atrial septal defect, and one with a patent ductus arteriosus, had congenital heart block.

TABLE I

PERMANENT PACEMAKERS
(University of Louisville)

	1965-67	1967-70	Totals
Males	20	53	73
Females	14	41	55
	34	94	128

TABLE II

INDICATIONS FOR PERMANENT PACEMAKER

	1965-67	1967-70	Totals
Complete A/V dissociation	19	67	86
Intermittent bradycardia	8	17	25
Tachyarrhythmia	0	3	3
Postoperative heart block	3	3	6
Myocardial infarction	4	2	6
Congenital	0	2	2
	34	94	128

*Professor of Surgery, Chief of Cardiovascular Surgery, University of Louisville School of Medicine, Louisville, Kentucky

The symptoms that brought these patients to surgery (Table III) were usually Stokes-Adams seizures, although congestive heart failure that was difficult to control because of the bradycardia, accounted for a significant group, and a few patients complained of generalized weakness with intermittent lightheaded spells. Eighteen per cent of the patients had an elevated BUN that was the result of low cardiac output, either alone or in combination with mild chronic renal disease.

TABLE III

SYMPTOMS

Stokes-Adams seizures	72%
Congestive heart failure	28%
Uremia	18%
Light-headed and weak	12%

The age distribution of the patients is shown in Figure 1. Permanent cardiac pacemaking is required at the extremes of life: in a small group of children the heart block results from surgical treatment of congenital heart disease or from congenital AV dissociation; but the vast majority of the patients are between 60 and 90 years of age, the mode being in the eighth decade. Seventy-one per cent of the patients were over 60 years old. One of our patients was over 100 when the unit was first implanted, and just recently died at 104 years of age, having undergone one pacemaker replacement. In the present series the incidence in males was slightly more common than in females, primarily because 38 patients were treated at the Veterans Administration Hospital.

There has been a change in the type of pacemaker used since 1967. Before this time, the Electrodyne unit with epicardial leads implanted at thoracotomy was the commonest form employed, and only four transvenous pacemakers were implanted (Table IV and Table V). The extremely high incidence of failures of these units, at first because of electrode fracture and later due to premature battery depletion, led to a change in both the unit and the type of electrode.

TABLE IV

TYPES OF PACEMAKERS EMPLOYED

	1965-67 (34 patients)	1967-70 (94 patients)
Electrodyne	39	6
General Electric	4	26
Medtronic	1	18
Cordis		
Ventricor	1	15
Ectocor	0	43
Atricor	4	12
	49	120

TABLE V

TYPES OF ELECTRODES

	1965-67	1967-70
Epicardial	30	16
Transvenous	4	81

In most cases now, a transvenous electrode is used and the pacemaker is inserted under local anestheisa. An epicardial electrode is still implanted by thoracotomy under general anesthesia in two situations: (1) children in whom a synchronous pacemaker is desired; and (2) adults who have a high threshold in the right ventricular myocardium that prevents satisfactory use of the transvenous electrode. Since 20-30 per cent of the patients will return to a normal sinus rhythm after being paced for a

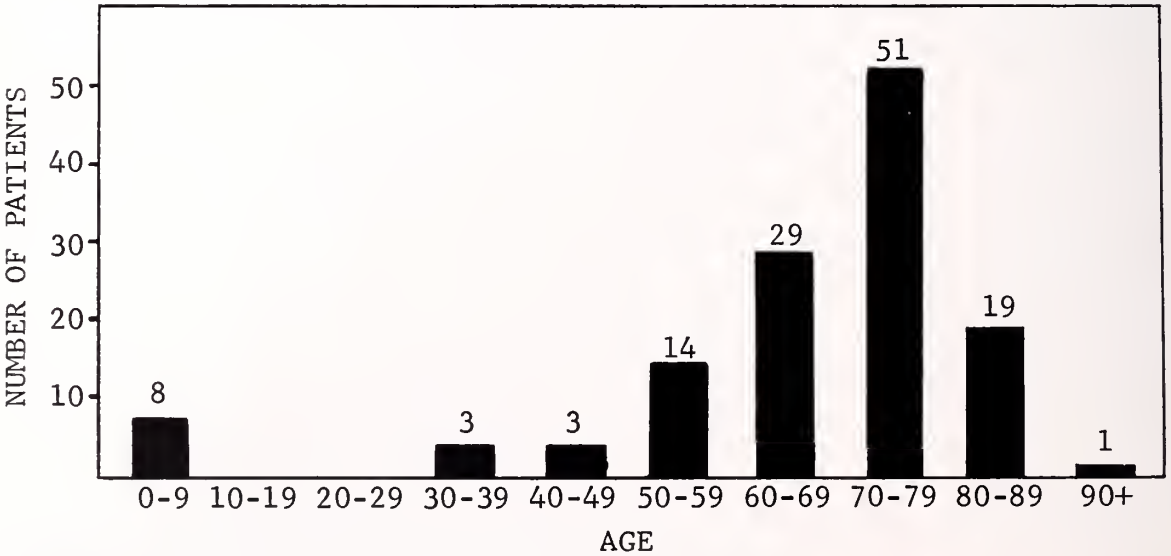


FIGURE 1 Age distribution of patients undergoing permanent pacemaker implant.

few weeks, a demand type of unit is preferred to avoid possible competition between the pacemaker and intrinsic beats, with possible resulting ventricular arrhythmia and sudden death.

In general, the medical service has tended to employ the General Electric and Medtronic units, while the surgical service has used the Cordis pacemakers. The Medtronic unit is more versatile in that its rate and output can be adjusted by the physician after implantation. However, the Cordis epicardial electrodes appear to be the most satisfactory, and the Cordis transvenous electrode is smaller and more easily inserted into a tiny peripheral vein than either of the other two.

At the time of implantation of a transvenous electrode, the threshold of the ventricular myocardium is tested by using an external pacemaker, in the case of the Medtronic unit, and by employing the resistors supplied by the manufacturer with each pacemaker, in the case of the Cordis unit. The position of the electrode is not accepted unless the output of the pacemaker is at least six times greater than the threshold of the myocardium, and preferably 10 to 15 times greater.

Death following permanent pacemaker implant is unusual during the hospital stay (Table VI). In the five-year period, only five of 128

TABLE VI

DEATHS AFTER PERMANENT PACEMAKER IMPLANT

	1965-67	1967-70	Total
In hospital	2/34	3/94	5/128 (4%)
Late	8/34	10/94	18/128 (14%)

patients have died in the hospital, a mortality of 4 per cent. Another 18 patients have died at varying periods from two weeks to four years after discharge from hospital, another 14 per cent. The in-hospital deaths were due to acute myocardial infarction in two cases, and pulmonary embolus, brain tumor, and recurrent tachyarrhythmia in one case each. None of the deaths followed thoracotomy with epicardial implantation of the leads, and in none was the pacemaker implant itself thought to be the cause of death, but rather it was progression of the patient's other disease.

The late deaths were due to continuing tachyarrhythmia in three patients, cerebral vascular accident in three, colon carcinoma in one, myocardial infarction in five, and from unknown causes in six (Table VII). Our experience with rapid fixed-rate pacing for permanent control of ventricular arrhythmias has

TABLE VII

CAUSES OF DEATH

In Hospital	
Myocardial infarction	2
Pulmonary embolus	1
Brain tumor	1
Tachyarrhythmia	1
Late (2 weeks — 5 years)	
Tachyarrhythmia	3
Stroke	3
Carcinoma	1
Myocardial infarction	5
Unknown	6

been very depressing; all four patients died of their advanced coronary disease in one to six weeks.

The morbidity of the operative procedure can be discussed in terms of postoperative hospital stay and local complications from the pacemaker implant. The duration of stay after implant is indicated in Table VIII. The patients

TABLE VIII

POST-OPERATIVE HOSPITAL STAY

	Mean (days)	Range (days)
Transvenous electrode	6	3-12
Epicardial electrode	9.6	6-11
Pacemaker replacement	4	2-6

who had a transvenous pacemaker inserted under local anesthesia stayed an average of six days after the implant, while those who underwent thoracotomy stayed 9.6 days. Replacement of a pacemaker unit resulted in a mean postoperative stay of only four days.

Local complications of the pacemaker implant were very infrequent (Table IX) and included one local infection in 128 cases, necessitating a change in the pacemaker site; one

TABLE IX

COMPLICATIONS OF PACEMAKER IMPLANT

Infection	1/128
Hematoma	1/128
Skin necrosis	1/128
Migration of unit	2/128
Perforation of ventricle	4/85
Dislodged electrode	2/85

hematoma that had to be aspirated; one case of skin necrosis in the incision that was controlled by debridement and did not require a change in the pacemaker site; and two patients who required a revision of the pacemaker pocket because the unit migrated over the chest wall or the abdomen. Local muscle twitching from

stimulation usually indicated that an electrode break had occurred, a rarity now. With the Cordis model, the electrode plate on the unit itself is positioned to face the skin surface rather than the pectoral muscle to avoid this annoying complication.

Six of the patients with transvenous electrodes required adjustment of its position under local anesthesia, because it became dislodged from the apex of the ventricle in two cases and perforated the right ventricular wall in four. None of the four cases with perforation of the ventricle developed cardiac tamponade, although in two cases this occurred in the first two days after electrode implant and two more occurred three and four months after the implant. The diagnosis was made by the occurrence of intermittent cardiac pacing and local mild pain over the precordium or in the epigastrium, along with intermittent stimulation of the diaphragm in two cases. All were treated by withdrawal of the electrode into the ventricle under local anesthesia.

As the experience of the physician increases, this occurs less frequently, because the electrode is positioned more exactly in the apex of the right ventricle, and the catheter is placed with a gentle curve through the right atrium and ventricle. If the catheter is lodged too firmly in the apex, slight buckling of the electrode will occur with each cardiac contraction, and gradual perforation of the ventricle results. Inexperienced physicans may also lodge the electrode in the coronary sinus, resulting in intermittent pacing. In these cases, the position of the electrode is mistaken for the right ventricular outflow tract, but this mistake can be recognized by its posterior position in the lateral view of the heart or by insisting that the catheter be passed out into the pulmonary artery branches and then gradually withdrawn into the ventricle and allowed to lodge in the apex.

The follow-up of the patients must be continuous after a pacemaker has been implanted. In the hospital, the function of the pacemaker is checked by frequent pulse rate recordings, an electrocardiogram the day after implantation, and a chest x-ray to record the position of the electrode.

After discharge, the patient is instructed to count his pulse once each week and to seek medical advice if the pulse rate drops five beats per minute below the base rate of the unit. The patient should also seek medical advice if he has any recurrence of his symptoms of syncope, fatigue, or lightheaded spells. He should be checked by a physician at three-month intervals the first year, every two months between 12 and 18 months, and monthly thereafter. Usually the units slow down over a period of one to three months, and elective replacement of the pacemaker can be carried out whenever this occurs.

Counting the pulse rate for a full minute is the simplest and most exact method of following the function of the pacemaker, although in puzzling cases the patient may have to be admitted to the hospital and his electrocardiogram monitored contiuously to look for intermittent episodes of pacemaker dysfunction or overriding competitive rhythms.

Originally, the major cause of pacemaker malfunction was a break in the electrode or a rising threshold at the site of its implant into the heart (Table X). This was a major problem

TABLE X

PACEMAKER ELECTRODE FAILURE

	No./Pts.
Electrodyne (Epicardial)	18/30
General Electric	1/30
Medtronic	1/19
Cordis	
Pervenous	0/45
Epicardial	1/16

with the original Electrodyne electrodes, and adjustment or replacement of these became an almost weekly adventure. Unfortunately, when the electrodes were improved to the point that they became reliable, premature battery failure of the units occurred in our experience, so their use was abandoned. Electrode failure with the present transvenous electrodes manufactured by Cordis, Medtronic, and General Electric is very rare; and the Cordis epicardial electrodes have been eminently satisfactory.

Now that the electrodes are no longer the problem, the usual cause of faulty pacemaker function is battery depletion. The mean period between implantation and replacement for each of the units is indicated in Table XI. Once again the Electrodyne unit had the shortest period of function; but very few of these units have been used in the last three years, so they may have been improved. With the other units, about half will have to be replaced by around

TABLE XI

PACEMAKER BATTERY FAILURE

	Mean Time (months)
Electrodyne	12.5
General Electric	19
Medtronic	*
Cordis	
Ventricor	22
Atricor	21.5
Ectocor	17.5

*Battery failure in two, at five and 17 months, and three deaths from recurrent tachyarrhythmias.

20 months and at least 80 per cent of them will require replacement by two years. The exception to this is the Cordis Ventricor, since in the accumulated experience of the manufacturer two-thirds of the units are still functioning at 24 months and one-third at 32 months. Our own experience with the Medtronic pacemaker is too limited to list, since only two units have failed, at five and 17 months, and three other patients died from recurrent tachyarrhythmias that were not controlled by fast fixed-rate pacing with this unit.

Summary

One hundred and twenty-eight patients have undergone implantation of a permanent cardiac pacemaker in the last five years at the University of Louisville. Death as a result of this procedure is extremely unusual, and local complications have been minimal. The postoperative stay in the hospital ranges from six to ten days, depending on the type of implant. The pacemaker electrodes are now seldom the cause of difficulty, and the major problem is battery failure. The units are usually replaced between 18 and 28 months, and detection of the failure is relatively simple. The improvement in life expectancy and cardiac function has been gratifying.

Acknowledgement

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Reference

1. Riedel, R. D. and Lansing, A. M.: Cardiac Pacemakers, *J. Kentucky Med. Assoc.* 66: 562, 1968.

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Complications of Smallpox Vaccination in Kentucky in 1968

Results of a Statewide Survey†

Joel L. Nitzkin, M.D.,* Loren Anderson, M.D., M.P.H.,** Joseph W. Skaggs, D.V.M., M.P.H.,*** and Calixto Hernandez, M.D., M.P.H.****

Kentucky documented 109 complications of smallpox vaccination in 1968. Frequency and type of complication varied with vaccination status, age and presence of skin disorder; case histories and suggestions for reduction of complication rates are discussed.

The Kentucky State Department of Health, with the endorsement of the Kentucky Medical Association, conducted a survey of complications to smallpox vaccine administered in Kentucky in 1968.

This study is one of the 10 state surveys‡ of complications to smallpox vaccination in the United States in 1968. The studies were designed to gain the best possible estimate of morbidity due to minor complications of vaccination and to gather enough cases of the more severe complications to allow adequate epidemiologic evaluation.

The year 1968 was chosen for study because of the availability of detailed vaccination data from a national survey conducted by the Bureau of the Census.[1] Each of the 10 states conducted its own survey and submitted its findings to the National Communicable Disease Center for collation into a final summary study.[2]

Similar surveys concerned vaccine given in North Carolina, Rhode Island, Washingon, and Wyoming for the year 1963. These studies, however, were conducted several years after the vaccine had been given and involved a relatively small population.

Methods

Case history and summary forms were sent to all Kentucky general practitioners and those with specialty certification in internal medicine, pediatrics, dermatology, public health, community health, neurology, psychiatry, plastic surgery, obstetrics, gynecology, opthalmology, or pathology. The roster included 2,565 (80.7 per cent) of Kentucky's 3,180 physicians, both M.D. and D.O. Board-certified anesthesiologists, radiologists, surgeons, and surgical sub-specialists were excluded in the belief that they would rarely deal with complications of immunization.

Introductory letters with case history questionnaires and return envelopes were first mailed to the selected physicians in February, 1968. Similar materials were sent to local health departments in March, 1968. These mailings were designed to alert the physicians and health departments to the fact that there was a specific desire on the part of the State Department of Health to gather detailed data on complications to smallpox vaccination and to provide forms for the submission of the necessary data.

In January, 1969, very brief summary forms were mailed out to all study physicians and all county health departments. Non-respondents were again sent summary forms in

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‡Alabama, Alaska, Iowa, Maine, Maryland, Rhode Island, South Carolina, West Virginia and Washington are the other participating states.

June, 1969. Reported complications were followed up by telephone to substantiate the diagnosis and obtain the necessary clinical and epidemiologic data.

The names and definitions of the various complications were based on the terms used by Neff, et al[3, 4] and are as follows:

ACCIDENTAL INFECTION — Vaccinal lesions resulting from accidental implantation of vaccinia virus in the eye, mouth, or on other parts of the body in the absence of eczema or other preexisting skin lesions.

GENERALIZED VACCINIA — Generalized vaccinal lesions which occur in the absence of eczema or other preexisting skin disease.

ECZEMA VACCINATUM — Vaccinal lesions either generalized or as individual lesions elsewhere than at the vaccination site in a person who has eczema or a past history of eczema.

VACCINIA NECROSUM — Spreading necrosis at the site of vaccination, with or without metastatic necrotic lesions occurring elsewhere on the body.

ENCEPHALITIS — Postvaccinal central nervous system involvement, including separately or in combination with the following symptoms: meningeal signs, ataxia, muscular weakness, paralysis, lethargy, coma, or convulsions.

OTHER — Includes vaccinal lesions complicating skin lesions other than eczema, plus miscellaneous complications not listed above, such as generalized urticarial reactions, vaccinia roseola, bullous erythma multiforme, and secondary bacterial infection.

The number of Kentuckians within each age group receiving primary vaccination or revaccination was estimated from a 35,000 household national immunization survey conducted by the Bureau of the Census[1] and a current population estimate provided by the Kentucky State Department of Health. Within each age group, the per cent of persons vaccinated or revaccinated in the national survey was multiplied by the Kentucky population estimate to provide approximate numbers of vaccinees for each age group and vaccination status.

Results

Of the 2,565 Kentucky physicians surveyed, 2,144 (83.6 per cent) completed and returned the summary forms. Similar forms were completed by each of Kentucky's 120 county health departments. One hundred and six physicians (5.0 per cent of those responding) and 13 county health departments (10.7 per cent) reported one or more complications.

TABLE I

COMPLICATIONS TO SMALLPOX VACCINE ADMINISTERED IN KENTUCKY IN 1968

COMPLICATION	NO. OF CASES	PER CENT OF CASES
Accidental Infection	67	61.5%
Generalized Vaccinia	21	19.3%
Eczema Vaccinatum	5	4.6%
Vaccinia Necrosum	1	0.9%
Postvaccinal Encephalitis	0	-
Other	15	13.8%
Morbilliform Rash	5	
Secondary Bacterial Infection of Vaccination Site	4	
Herpes-like Rash	2	
Erythema Multiforme	1	
Impetigo Complicated By Vaccinia	1	
Arthralgia	1	
Vomiting and Malaise	1	
TOTAL	109	100.1%

More than 150 reports of complications were received. Telephone interviews of the reporting physician or health department were used to gather the necessary study data and to eliminate duplication when complications were reported from more than one source. Twenty-nine patients were excluded from tabulation because of inadequate clinical data (age or type of complication unknown), diagnosis of "bad take," or because the complication was due to vaccine administered in years other than 1968.

One hundred and nine complications reported by 83 physicians and 12 county health departments were attributed to smallpox vaccination performed in Kentucky in 1968. The distribution of complications by diagnosis is presented in Table I. There were no cases of postvaccinal encephalitis and no fatalities. Ninety-three (85.3 per cent) of the reported complications were relatively mild in nature, requiring neither hospitalization nor specific antivaccinia medication.

An estimated 241,000 Kentuckians were vaccinated against smallpox in 1968. Of these, approximately 104,000 (43.0 per cent) received primary vaccinations and 137,000 (57.0 per cent) revaccinations. Of the 109 complications reported for 1968, 70 (64.2 per cent) were in primary vaccinees, 18 (16.5 per cent) in revaccinees, 15 (13.8 per cent) in contacts, and 6 (5.5 per cent) in persons whose vaccination status was unknown. These data are

TABLE II

SMALLPOX VACCINE COMPLICATION RATES BY AGE AND VACCINATION STATUS, KENTUCKY, 1968

AGE	PRIMARY VACCINATIONS			REVACCINATIONS			CONTACTS	VACC. STATUS UNKNOWN
	Vaccinees*	Complications		Vaccinees*	Complications			
		No.	Rate**		No.	Rate**	No.	No.
0 through 11 months	13,000	11	846	-	-	0	-	-
12 through 23 months	28,000	15	536	1,000	-	0	-	-
2 through 4 years	26,000	26	1,000	8,000	3	375	3	4
5 through 9 years	25,000	14	560	27,000	11	407	7	2
10 years +	12,000	4	333	101,000	4	40	5	-
TOTAL	104,000	70	673	137,000	18	131	15	6

* Estimated from data in United States Immunization Survey—1967-1968, U. S. Department Health, Education and Welfare, and a current Kentucky Population Estimate.

** per 1,000,000 vaccinees.

shown in Table II, along with complication rates by vaccination status and age.

The overall attack rate following primary vaccination was 673 per million vaccinations, more than five times the attack rate following revaccination, (131 per million). Among childhood primary vaccinees, the lowest complication rate, (536 per million), was seen in infants 12 to 24 months of age. The highest complication rate, 1,000 per million, was seen in primary vaccinees two through four years of age. Revaccination was associated with less risk at all ages, with the lowest complication rate, (40 per million), among those 10 years of age and older. While the difference in attack rate between primary vaccinees and revaccinees was highly significant ($p<0.005$), differences in attack rate by age were not statistically significant. These rates by age and vaccination status do not include the six complications in persons whose vaccination status was unknown.

The more detailed data, showing complications by diagnosis, age and vaccination status are shown in Tables III and IV. Accidental infections accounted for 61.5 per cent of all reported complications.

The most frequent and most severe accidental infections were those involving the eyes. Ocular involvement was observed in 17 (25.4 per cent) of the 67 reported accidental infections and resulted in three of the four hospitalizations for accidental infection. Corneal scarring with residual loss of vision occurred in two patients. The first, a 60 year old contact of a small child, experienced corneal scarring despite vigorous treatment with gamma globulin and 10 days of hospitalization. The second, a two year old primary vaccineee, was not brought to medical attention until after scarring occurred. Three girls and two boys ranging in age from one to five experienced vaginal or peri-anal implants, one with significant constipation. A 35 year old woman presented with accidental implantation on the lip after kissing her nephew's vaccination site.

Generalized vaccinia accounted for 21 (19.3 per cent) of the 109 complications and three of the nine hospitalizations. Two of the non-hospitalized patients received gamma globulin or VIG (vaccinia immune globulin). The most unusual case of generalized vaccinia involved a 34 year old woman who was vaccinated in September, 1968, and experienced fever, malaise, blebs between her fingers and between her toes, and generalized vaccinal lesions slowly evolving over a three-month period. She recovered without gamma globulin or VIG.

The five patients with eczema vaccinatum ranged in age from one to seven years. Three were primary vaccinees, one an unvaccinated sibling contact, and one a revaccinee. Two of the primary vaccinees received VIG, but none were hospitalized.

One child, a seven year old boy, was revaccinated while experiencing clinical impetigo.

TABLE III

COMPLICATIONS TO SMALLPOX VACCINATION BY AGE AND DIAGNOSIS, KENTUCKY, 1968

AGE	ACCIDENTAL INFECTION	GENERALIZED VACCINIA	ECZEMA VACCINATUM	VACCINIA NECROSUM	OTHER	TOTAL
0 through 11 months	6	5	0	0	0	11
12 through 23 months	7	3	1	0	4	15
2 through 4 years	24	6	2	1	3	36
5 through 9 years	22	5	2	0	5	34
10 years +	8	2	0	0	3	13
TOTAL	67	21	5	1	15	109

TABLE IV

SMALLPOX VACCINE COMPLICATION CASES[a] AND RATES[b] BY AGE, DIAGNOSIS AND VACCINATION STATUS

	CASES[a]						RATES[b]					
PRIMARY VACCINATIONS												
AGE	AI	GV	EV	VN	Other	TOTAL	AI	GV	EV	VN	Other	TOTAL
0 through 11 months	6	5				11	462	385				846
12 through 23 months	7	3	1		4	15	250	107	36		143	536
2 through 4 years	17	5	1	1	2	26	654	192	38	38	77	1,000
5 through 9 years	9	2	1		2	14	360	80	40		80	560
10 years +	2	1			1	4	167	83			83	333
TOTAL	41	16	3	1	9	70	394	154	29	10	87	673
REVACCINATIONS												
0 through 11 months						-						-
12 through 23 months						-						0
2 through 4 years	2				1	3	250				125	375
5 through 9 years	5	2	1		3	11	185	74	37		111	407
10 years +	1	1			2	4	10	10			20	40
TOTAL	8	3	1	-	6	18	58	22	7	0	44	131
CONTACTS[c]												
0 through 11 months						-						
12 through 23 months						-						
2 through 4 years	2		1			3						
5 through 9 years	7					7						
10 years +	5					5						
TOTAL	14	-	1	-	-	15						

[a] excluding six cases in vaccinees in wham vaccinatian status was nat knawn
[b] per 1,000,000 vaccinees
[c] Among the 15 cantacts: four had never been vaccinated, three had been previously vaccinated, and vaccination status was unknown in eight.

His febrile course and multiple vaccinia implantations again demonstrates the hazards of vaccination in the presence of skin disease.

One patient with probable vaccinia necrosum was reported. This four year old primary vaccinee developed an ulcer one cm. deep and about five cm. in diameter at the site of vaccination. A large dose of gamma globulin 21 days after vaccination resulted in prompt healing of the ulcer, and severe residual scarring. The patient did not have a past history suggestive of immunological disorder and laboratory studies were not performed.

Five primary vaccinees, one to five years of age, presented with a generalized morbilliform rash ("vaccinia roseola") following vaccination. Another child, a one year old primary vaccinee, had a mild case of erythema multiforme which cleared following antihistamine therapy. A five year old primary vaccinee and a 10 year old revaccinee developed lesions typical of herpes labialis following vaccinations. Each of these rash-illnesses may or may not have been due to vaccination. Inclusion of these patients as probable complications to smallpox vaccination is based on the observation of similar rashes following vaccination in other surveys[3,4,5] and onset of rash within two weeks following vaccination.

Two non-dermal complications were reported. One was experienced by a 35 year old physician revaccinee who noted severe pain in the left knee from the fifth through the tenth day postvaccination, simultaneous with the evolution of his vaccinia reaction. Postvaccinal arthritis, although rare, is a well documented

phenomenon.[6,7] The other non-dermal complication consisted of vomiting and severe malaise in a five year old revaccinee about a week and a half after vaccination. The diagnosis of postvaccinal encephalitis was seriously entertained, but rejected for purposes of statistical tabulation due to the lack of more specific clinical signs or symptoms.

Four cases of secondary bacterial infection have been included in the survey. Three of them, four, six and 57 years of age, were primary vaccinees. The fourth was a five year old revaccinee. Each of these patients experienced fever and gross axillary lymphadenopathy, and each responded favorably following antibiotic therapy.

Fourteen patients were originally reported as possible secondary bacterial infections, but only four had documented fever, lymphadenopathy, and a favorable response following antibiotic therapy. These patients required more medical attention than many of the persons experiencing more readily identifiable complications. While detailed analysis of the age and vaccination-status of four patients may be of relatively little value, secondary bacterial infection must be considered a significant source of morbidity following smallpox vaccination.

Discussion

Kentucky had no documented postvaccinal encephalitis and no deaths attributable to vaccination in 1968. Single cases of postvaccinal encephalitis were observed in Kentucky, however, in 1967 and 1969. Deaths attributed to vaccination were reported in 1963 and 1966. These two fatalities, both due to encephalitis, were in boys six and 13 years of age.

Determination of the risks attributable to vaccination requires either a direct count or a reasonable estimate of the number of persons vaccinated or revaccinated within each specified group.

The estimated numbers of vaccinees and revaccinees in this study are based on the vaccination rates observed for each age group in a 35,000 household national survey[1] and a current Kentucky population estimate.[8] The limited data available from immunization surveys performed in a cross section of Kentucky counties from 1963 through 1969[8] and the infant immunization surveillance program[8] suggest that the national rates overestimate the number of Kentuckians vaccinated below one year of age and underestimate the number vaccinated and revaccinated in the five to nine age group. Adjustments of the rates based on these findings would result in an increase in the complication rate below one year of age and a decrease in rate in the five to nine age group. Such alterations would not, however, change the remarkably high rate among primary vaccinees two to four years of age.

This study and the 10-state survey[2] of which it is a part, represent the best data available on the frequency of relatively mild complications to smallpox vaccination in the United States. Previous morbidity studies collected data only from relatively small populations,[3] were conducted retrospectively several years after the complications had occurred,[3,4] or were limited to a few relatively severe complications.[4,5]

The over-all national surveillance complication rates are only about one-tenth the rates reported in this and other[2,3] state surveys. Most of this difference is due to the frequency of relatively mild complications detected only by the state surveys.

One significant weakness of all of these studies is that only complications reported by practicing physicians and official health agencies are included. Complications never brought to medical attention and those forgotten by the physician when filling out the survey questionnaire have been excluded. Nevertheless, the similarity in age-specific attack rates for individual complications between the present study and those reported from other states[2] shows the survey methodology to be consistent, if not complete, from state to state.

Data from this and other studies[2,3,4,5] suggest ways of reducing the frequency of complications due to smallpox vaccination:

1) The continued occurrence of eczema vaccinatum and other dermal complications in both vaccinees and household contacts with underlying skin disorders remains a major problem. Indefinite deferral of vaccination in such patients, even to the point of their never being vaccinated against smallpox, may be preferable to exposing them to the hazard of a severe vaccine reaction. When such persons must be vaccinated for foreign travel to an endemic area or exposure to a case of smallpox, serious consideration should be given to the administration of VIG at the time of vaccination. Special attention must also be given to the possibility of a household contact with skin disease. Lane, et al,[10] have documented 12 deaths due to eczema vaccinatum in contacts of vaccinees.

2) The most recent national survelliance study[5] shows 11 cases of vaccinia necrosum in patients with immunological deficit. Indefinite deferral of vaccination might also be considered in this group. The extreme unlikelihood of any person in the United States being exposed to smallpox should be weighed in the balance when dealing with patients at high risk of a complication.[11,12] Included in the high risk group are individuals with altered immune states due to leukemia, lymphoma, and other reticuloendothelial malignancies; dysgammaglobulinemia; therapy with immunosuppressive drugs, such as steroids and antimetabolites; or radiation.

3) Data from studies largely restricted to severe complications[3,5,9,10] provide adequate reason to delay primary vaccination until the second year of life. The literature on this subject is reviewed elsewhere[11,12,13] and need not be repeated here. Statistically significant age differences were not found in this study, reflecting the small number of complications observed in a single state and/or the possibility that risk of developing a mild complication is not as age-dependent as the risk of experiencing a more severe complication.

4) A provocative but unsubstantiated finding in this study is the high rate of relatively mild complications in children two to four years of age. Most of these complications (17 of 24) were due to accidental infections. This high rate of accidental infection agrees with the clinical impression of many practicing pediatricians and suggests that some complications might be prevented by delaying primary vaccination of children who missed vaccination during the second year of life until after the fifth birthday. No data are available from other studies upon which to confirm or deny this impression. The lack of data seems to be due to the custom of pooling all children one through four years of age into a single group for purposes of tabulation.

Summary

A survey of 2,525 Kentucky physicians and Kentucky's 120 county health departments was conducted to study the frequency, nature and severity of complications to smallpox vaccine administered in Kentucky in 1968. An estimate of the number of persons vaccinated and revaccinated by age group was calculated from National Immunization Survey data and a recent Kentucky population estimate.

Two thousand, one hundred and forty-four physicians, 83.6 per cent of the surveyed population, and all 120 county health departments responded or were followed up in the survey. One hundred and nine complications were reported, including 67 cases of accidental infection, 21 cases of generalized vaccinia, five cases of eczema vaccinatum, one case of vaccinia necrosum, and 15 other complications including a case of postvaccinal arthritis. There were no cases of postvaccinal encephalitis and no deaths. Sixteen patients required hospitalization and/or specific antivaccinia therapy.

Seventy complications were identified in primary vaccinees, 18 in revaccinees, 15 in contacts and six in patients in whom previous vaccination status was unknown. The attack rate in primary vaccinees, 673 per million, was more than five times the attack rate in revaccinees, 131 per million. Complication rates were highest in primary vaccinees less than 12 months and two through four years of age.

The occurrence of multiple implantations in a child with active impetigo and five cases of eczema vaccinatum again point out the importance of screening vaccinees and their household contacts for significant skin disorders.

Acknowledgement

The authors are indebted to George Brockman, M.D., of KMA, for his assistance in the initial phases of the study and to J. M. Lane, M.D., and F. L. Ruben, M.D., of the Smallpox Eradication Program, National Communicable Disease Center, for their assistance in the design of the study and preparation of the manuscript.

References

1. *United States Immunization Survey: 1967-1968*, United States Department of Health, Education, and Welfare, p. 24.

2. Lane, J. M., et al: Complications of Smallpox Vaccination, 1968, Results of Ten Statewide Surveys. Unpublished data, Smallpox Eradication Program, National Communicable Disease Center, Atlanta, Georgia.

3. Neff, J. M., et al: Complications of Smallpox Vaccination United States, 1963, II. Results Obtained by Four Statewide Surveys, *Pediatrics* 39:916-923, 1967.

4. Neff, J. M., et al: Complications of Smallpox Vaccination, I. National Survey in the United States, 1963; *New England Journal of Medicine* 276:1-8, 1967.

5. Lane, J. M., et al: Complications of Smallpox Vaccination, 1968, National Surveillance in the United States, *New England Journal of Medicine* 281:1201-1208, 1969.

6. Silby, H. M., et al: Acute Monarticular Arthritis After Vaccination, Report of a Case with Isolation of Vaccinia Virus from Synovial Fluid, *Annals of Internal Medicine* 62:347-349, 1965.

7. Holtzman, Charles M.: Postvaccination Arthritis, *New England Journal of Medicine* 280:111-112, 1969.

8. Unpublished Data, Office of Communicable Diseases, Kentucky State Department of Health.

9. Conybeare, E. T.: Illness Attributed to Smallpox Vaccination During 1951-1960. Part II: Illness Reported as Affecting the Central Nervous System, *Monthly Bulletin of the Ministry of Health* 23:150-159, 1964.

10. Lane, J. M.: Deaths Attributable to Smallpox Vaccination 1959 to 1966, and 1968, *Journal of the American Medical Association* 212:441-444, 1970.

11. Nitzkin, J. L.: Complications of Smallpox Vaccination.

12. Lane, J. M.; and Millar, J. D.: Routine Childhood Vaccination Against Smallpox Reconsidered, *New England Journal of Medicine* 281:1220-1224, 1969.

13. Neff, J. M.; and Lane, J. M.: Smallpox Vaccination: Before or After One Year of Age?, *Pediatrics* 42:986-989, 1968.

Urologic Emergencies†

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Southfield, Michigan

If certain precautions are followed, operative injuries to the urinary tract during abdominal and pelvic surgery can be avoided.

THE possibility of injury to the urinary tract is a constant danger whenever abdominal or pelvic surgery is performed. These complications can be quite serious, as well as embarrassing. They usually can be avoided; and if they occur, they can often be handled with a minimum of trauma and discomfort. I would like to discuss some preoperative and operative precautions which should be remembered, as well as the actual treatment of these injuries, should they occur.

1. Adequate preoperative evaluation will prevent many of these complications.

a. An intravenous pyelogram should be obtained before any pelvic surgery is contemplated.

b. Preoperative ureteral catheterization is also a useful adjunct in selected cases. I do not recommend it as a routine procedure, because postoperative ureteral obstruction due to edema and bleeding is not uncommon. Preoperative ureteral catheterization is especially useful when operations on inflammatory conditions of the large bowel, such as diverticulosis, or endometriosis of the pelvic organs are involved. The ureteral catheters should be removed following the operation, and the patient should be well hydrated; at times osmotic diuretics such as Mannitol, could be used in order to prevent postoperative urinary tract sequelae.

2. During pelvic operations two precautions should be observed.

a. Identify the bladder and ureters before cutting.

b. If hemorrhage occurs, do not clamp blindly. Apply pressure over the bleeding point itself, or put pressure on the internal iliac artery until the actual bleeding vessel is found.

3. Some gynecologists like to use the "so-called chain cystograms" prior to anterior colporrhaphy or Marshall-Marchetti procedures. The object of this study is to demonstrate the urethro-vesical angle. When the chain cystogram is completed, the chain should be removed. One of the complications of a chain cystogram is that the chain may tie itself into a knot within the bladder; fortunately it can be removed endoscopically.

Injuries to the bladder do not pose any particular problem if they are recognized during surgery. It should be closed with two-layer absorbable suture, and the patient should be kept either on suprapubic or urethral catheter drainage for from five to seven days.

Delayed recognition of bladder injuries or inadvertent placement of the sutures through the bladder and the vaginal walls often result in a vesico-vaginal fistula. This injury most frequently occurs while a total abdominal or vaginal hysterectomy is performed. This type of fistula will often close spontaneously, but the difficulty in keeping a patient dry is a rather miserable situation. Time is of the essence; at least three months or longer are required for these fistulae to close spontaneously or for the inflammatory reaction to subside before any operative closure is contemplated.

I prefer closing vesico-vaginal fistulae, particularly the low lying ones, vaginally. Several preoperative precautions must be taken: (1) intravenous pyelograms, (2) cystoscopy, (3) extreme lithotomy position. In each case the fistulous tract is excised, the bladder closed by inverting the edges intracystically and the vaginal mucosa outwardly. Each layer is closed separately and carefully. I prefer using absorbable sutures for the bladder and black silk for the vaginal portion of the closure.

Larger defects in the bladder, higher in the vagina, can be closed from below, but are more simply closed either transvesically or transperitoneally. The closure is essentially the same. The fistula is excised; the vagina is closed in one layer and the bladder carefully closed with two layers of absorbable suture from above. It is important that no neoplasm be present in the area of the fisula and that enough time has

†*Presented at the first general session, 1970 KMA Annual Meeting, September 22, Louisville*
**Clinical Professor of Urology, Wayne State University School of Medicine*

elapsed from the previous surgical procedure to allow any inflammatory reaction to completely subside. It is also extremely important to prevent apposition of suture lines in the bladder and vagina.

Injuries to the lower ureter involve immediate recognition and treatment; usually the recovery is prompt. This may be handled in several ways; the simplest and the best is usually to reimplant the ureter into the bladder. If the ureter is transected in the area of the iliac vessels, an end to end anastomosis is possible, but occasionally a ureteroneocystotomy is mandatory. If there is any tension on the ureterovesical anastamosis, the bladder can be utilized to form a tube, and thus elongate the bladder segment. Splinting catheters are not always necessary; but if you feel more assured, bring it out through the wound or pass it down the ureter into the bladder and out through the urethra, so that it can be removed at a later date.

Ureteral ligation which has not been recognized during the operation, but immediately following the operation, can be treated either by immediately reopening the wound and removing the ligature and/or doing a nephrostomy, followed by a ureteral neocystostomy at a later date. Remember that a kidney can be saved even if complete obstruction is present several months. One case has been reported in which a ligated ureter was unrecognized for 90 days and the kidney returned to normal after reimplantation. Many urologists have reported cases in which immediate ureteroneocystotomy was carried out without temporary nephrostomy. Certainly this has an advantage in avoiding infection which always accompanies nephrostomy.

Ureteral injuries in which complete obstruction is not present can be treated conservatively. Some patients develop uretero-vaginal fistulae, while others have a minimal hydronephrosis which subsides.

Finally we get to the most serious of all injuries, when a large portion of the upper ureter is destroyed, making end-to-end anastomosis impossible. This type of injury is sometimes seen when removing a large carcinoma of the colon. Nephrectomy is the safest and most definitive procedure possible. However, before contemplating the removal of a kidney, it is imperative to know the presence of the opposite one. It is not sufficient to palpate a kidney, but one must be certain of its function by intravenous pyelography.

If an attempt is made to preserve the kidney, three procedures are possible: (1) substitution of a loop of ileum, (2) transureteral ureterostomy, (3) auto transplantation. The latter is the most complicated and it should not be attempted by the gynecologist or general surgeon unless he is quite familiar with kidney transplantation, and perfusion equipment is available.

In summary, injuries to the urinary tract can usually be avoided by thorough preoperative investigation and careful operative technique. If an injury is recognized at operation, prompt treatment is generally successful. The complicated problems are seen in injuries that are not recognized at surgery. Here an imaginative approach utilizing established surgical principles is necessary.

SPECIAL ARTICLES

Some Clinical Observations of Drug Abuse Among G. I.'s in Vietnam†

MAJOR FRANKLIN D. MASTER, M.D.*

From October, 1969, to October, 1970, the author functioned as the sole psychiatrist for the U.S. military in the coastal region of Northern II Corps in the Republic of Vietnam, a territory approximately 25 miles wide and 120 miles long, containing slightly over 45,000 American military and civilian personnel. One of the major problems observed among the G.I.'s was that of drug abuse. As drug abuse is a problem of ever-increasing concern to physicians throughout our country today, it was suggested that I share some of these observations with local physicians who are now beginning to face similar problems of rising drug abuse.

A wide variety of drugs is used by a substantial number of G.I.'s in Vietnam. Practically all of these drugs are locally produced in Vietnam and are sold and distributed to the G.I.'s by civilian Vietnamese. Attempts by American military authorities to stem this illicit traffic in drugs have proven hopelessly inadequate. There is no noticeable attempt on the part of the Vietnamese government to control the flow of drugs, and most purchases of drugs by the G.I.'s from the Vietnamese are now made quite openly. Drugs sold include: narcotics, barbiturates, cannabis (marijuana, hashish), and amphetamines.

Shortly before I left Vietnam, a locally produced lysergic acid hallucinogen (LSD) had also made an appearance. The specific forms of these drugs used are constantly changing. I shall attempt to describe the drug picture as it existed during my year in Vietnam.

Throughout most of the year, the major narcotic in use in Vietnam was opium. This opium was sold in raw form and was generally smoked, although it was occasionally chewed or swallowed in small pieces. The opium was either smoked in a pipe, mixed with marijuana and smoked as a mixed cigarette, or painted as a tarry paste onto the outside paper wrapper of a marijuana cigarette.

Shortly before I left Vietnam, injectable heroin appeared on the drug scene. I personally saw only one case of physical addiction to narcotics requiring withdrawal in a hospital setting: this was a case of a young Puerto Rican G.I. from New York City who regularly injected heroin intravenously and who had been physically addicted to narcotics at age 16, prior to military service. My theory is that, by smoking opium in the fashion used in Vietnam, the G.I.'s simply could not absorb enough opium to become physically addicted. The quantity of opium used in the mixed marijuana cigarettes (the "O.J." reefers) was insufficient for the production of addiction; if smoked in a pipe, the resultant drowsiness produced by the opium would cause the user to fall asleep and his pipe to become unlit, thus reducing the quantity of opium used to subaddicting levels.

I might add that, as I left Vietnam, the "snorting" of heroin (using the nasal mucosa as the chief absorption route of the narcotic by placing a pinch of heroin powder into each nostril) was also coming into vogue among drug users there.

Barbiturates were made locally in Vietnam through a formerly French-owned pharmaceutical company in Saigon, and were sold widely either over the counter in Vietnamese pharmacies or through the ubiquitous Vietnamese civilian middle-men (referred to as "pappa-sans" or "mamma-sans" by the G.I.'s).

Various trade names for these barbiturates were Binoctal, Iminoctal, and Ansional. All were white tablets sold wrapped in individual tin foil packets and placed in neat plastic boxes. Iminoctal was sold primarily further north, in the Hue/Da Nang region, so I never had contact with this drug. Ansional was a mixture of 100 mg. of secobarbitol and 200 mg. of meprobamate. Binoctal, the most popular of the local barbiturates, was a mixture of 90 mg. of secobarbitol and 90 mg. of amytobarbitol. This latter product was colloquially referred to as "B.T.'s," "dimes," and "lows."

Over the year, I treated two cases of physically addicted patients requiring barbiturate withdrawal over a two-week period of hospitalization. Medicine service at our evacuation hospital, however, treated approximately 20 patients over the year for barbiturate overdose. These cases of overdose were not genuine suicide gestures, but rather miscalculations through ignorance by the young users of the barbiturates as to the lethality of these "B.T.'s."

The typical case history would be that of a user having had such a satisfying experience becoming intoxicated on four or five tablets that he would then

† Written November, 1970

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ingest 10 or 12 tablets and be brought to the hospital comatose and requiring artificial respiration. Thanks to a combination of skillful medical management, excellent nurses, and the physical stamina and youth of the patients, there were no fatalities from such overdoses.

A study performed by the army mental hygiene team at Cam Rahn Bay—using questionnaires to ask anonymously the G.I.'s leaving and entering Vietnam through Cam Rahn Bay in November, 1969, the degree of drug use—obtained the following figures. Twenty-six per cent of the G.I.'s had experimented with barbiturates during the year and five per cent had been frequent users of barbiturates. My own opinion is that these are reliable figures. I would attribute the fact that we did not see more physical addiction to barbiturates to the practice of G.I. drug users' never staying with just one drug; but rather changing off the various drug classes, from one to the other, to sample a variety of amphetamines, barbiturates, cannabis, and narcotics.

The Vietnamese barbiturates had originally been designed for use as sleeping pills, and were prescribed by native Vietnamese physicians for that purpose, but were used by the G.I.'s solely as intoxicants. As any drug may be obtained over the counter in any Vietnamese pharmacy without a prescription, the purchase of such drugs from legitimate Vietnamese pharmacies was a relatively simple matter for the G.I. drug user.

Amphetamine products were as frequently used in our area, as were barbiturates. The amphetamines used in our area came in two forms. Most popular was a brown liquid in a cough syrup bottle that was labeled "Obesitol." This product was an amphetamine mixture with an alcohol base that was thickly laced with sweeteners and had a pleasant, syrupy taste. Because of the high sugar content of this product, the typical picture presented by the constant user of Obesitol was that of an extremely aggressive, agitated, tense, disheveled, psychotic young man who was physically and verbally abusive, skinny, and who had very bad teeth.

The other form of amphetamine that was in wide use in our area was a clear liquid sold in small, one fluid ounce glass vials, known as "Maxitron Forte." This form could either be ingested orally or injected intravenously. This product lacked the taste and oral satisfaction provided by Obesitol, but had the advantage of coming in smaller containers and thus being less easily detected by military authorities.

Over the year, I saw approximately 80 cases of toxic psychotic states resulting from amphetamine intoxication. These states were characterized by extremely aggressive and violent behavior, rapid, slurred speech, agitation, emotional lability, and an extremely short attention span. As we lacked closed-ward psychiatric facilities at our hospital, and as we shared a hospital ward with extremely ill medical patients, our usual initial approach to amphetamine-induced psychoses was to have the unit keep the man under constant watch and confinement within the unit for a 48-hour observation period with no medications, and then to return the man to the mental hygiene clinic. In over 90 per cent of the cases, the man would then appear alert, rational, coherent, and well-oriented. In ten of these cases, however, the patients still appeared agitated and psychotic. These patients were then hospitalized and treated with phenothiazines. Although the individual doses varied with individual body builds and states of agitation, an average dose would be about 200 mg. of chlorpromazine four times daily. Two of these patients responded well within 48 hours to this treatment and were able to return to duty. The other eight patients, however, had deepening symptoms of delusional thinking of both a grandiose and persecutory nature, inappropriately angry effect, autism, and loosened associations. These eight patients all required medical evacuation, and presented clinical pictures indistinguishable from that of acute paranoid schizophrenic reaction. Followups were received on six of these eight patients after their evacuation to Japan; and indicated that, after six weeks of treatment, all had been considered ill enough to evacuate from Japan to CONUS for additional psychiatric hospitalization.

By far the most commonly abused drug in Vietnam, and the one which has received the most attention, is cannabis, or marijuana. Estimates as to the extent of marijuana use among the G.I.'s in Vietnam vary widely. If one listens to the actual marijuana users, he will be told that all enlisted men are using it, and that at least 65 per cent of the officers are similarly "turned on."

The most accurate and carefully done study of the extent of marijuana use among G.I.'s was one conducted by Major John J. Treanor, M.D., and First Lieutenant James Skripol, the brigade surgeon and brigade psychologist, respectively, of the 8,000-man 173rd Airborne Brigade, one of the units to which I provided psychiatric coverage. They used a questionnaire which was answered by the men anonymously and covered the entire troop strength of the Brigade. Their findings were that practically no senior NCO's or officers used marijuana on a regular basis, and that very few had even experimented with this drug. Among lower ranking enlisted personnel (ranks E-5 and under) they found that, while 70 per cent had experimented with marijuana, either in civilian life or the military, only 16 per cent, or one in six, used marijuana on a repeated or regular basis.

A strong social pressure was exerted by cannabis users on nonusers to be "with it" and "turn on" with marijuana. Seldom was the drug used by lone individuals; rather, the "pot party" had a social appeal that appeared to be equal to, if not greater than,

the pleasure of the actual inhalation of marijuana. Refusal to participate in cannabis use aroused tremendous animosity among the cannabis users, as I personally experienced on several occasions.

The variety of cannabis used in Vietnam in making marijuana cigarettes (known as "reefers," "joints," or "J's") is from a different species, *Cannabis indica,* than that used in the continental United States for manufacturing marijuana cigarettes. The *Cannabis indica* used in Vietnam had a reportedly far greater concentration of marijuana's active hallucinogenic ingredient, tetrahydrocannabinol, than its North American counterpart.

There appeared to be a definite connection between psychoses seen during the year and cannabis use. Of 58 psychotic patients seen during the year requiring hospitalization and evacuation, all but three had been users of cannabis. Approximately half of these patients had used another of the Vietnamese drugs in some combination with cannabis; about half, however, had used only cannabis. Most of these patients were unable to give accurate histories as to the amount and frequency of cannabis use. In most of these cases, no history of prior emotional difficulty could be elicited from the units that knew these men. The clinical pictures presented in these cases were those of schizophrenic reactions of either the paranoid or undifferentiated types. Because of the absence of a history of prior emotional illness in these patients, a diagnosis of "Acute Stress Reaction" rather than of "Schizophrenic Reaction" was made on these patients.

One phenomenon observed clinically by myself, the other physician in the mental hygiene clinic, and several battalion surgeons and dispensary physicians was a very real organic brain syndrome that regularly developed among chronic cannabis users (those who would smoke an average of five to ten marijuana cigarettes per day over a three- to six-month period). This organic brain syndrome was manifested by increasing difficulty with memory, difficulty performing mathematical calculations, difficulty with both inductive and deductive reasoning, inability to interpret proverbs abstractly, and easy distractibility. Verbal ability remained intact, and every one of these cannabis users, to the man, firmly denied the existence of any intellectual deficit. My observations and those of the general medical officers were purely clinical and casual. I believe, however, that a fertile field of investigative study would lie in following up our casual observations with some solid research in psychometric testing to see if such organic intellectual impairment does indeed occur predictably with constant, heavy cannabis use, and the extent of such impairment if it does occur.

To complete the full picture of the drug scene in Vietnam, a final word should be said about lysergic acid derivative hallucinogens. During my year in Vietnam, no LSD was manufactured in Vietnam, and, to my knowledge, little or none was imported. Close to 50 patients were seen over the year claiming that they were experiencing LSD "flash-backs." Every one of these patients seen was felt to be fabricating these stories of flash-backs in order to obtain some secondary gain. As the year ended, however, psychiatrists at the mental hygiene team in Long Binh were reporting cases of patients using LSD manufactured in Saigon; so my statements on the lack of LSD use in Vietnam may no longer be valid.

I have no easy solutions to suggest as to how this problem of drug abuse may best be handled. I have, however, reached the following conclusions from my year in Vietnam: that none of these drugs is benign; that the abuse of any of these drugs, including cannabis, leads to very real psychological and organic brain damage; and that this drug abuse should be viewed by the entire American medical profession as the nation's leading health menace today. For these reasons, I find myself very strongly opposed to any legalization of drugs, including cannabis. I have just witnessed an American society which had easy access to drugs, and I am alarmed at what I saw.



Foundations

There are all sorts of foundations: concrete, elastic, legal, and moral, for example. All of them incorporate the concept of strength and support. Strength and support are two things medicine can use plenty of. It seems appropriate, then, that KMA is interested in gathering data about Foundations.

As presently set up in several areas in this country, Foundations consist of groups of physicians and lay persons, legally established as entities separate from medical associations, who enter into contracts with "third parties" (insurance companies and/or governmental agencies). Generally speaking, the obligation of the Foundation, under such a contract, is: (1) to assure for its physician-members the receipt of usual, reasonable and customary fees for their services (by accepting and encouraging insurance companies writing comprehensive coverage policies); (2) to assure the insurance companies involved that only those fees which are, indeed, usual, customary and reasonable, will be approved for payment (by working out fee "ranges" and utilization "ranges" for standard procedures, and by offering peer review boards of local physicians to consider any cases not payable by routine clerical screening); and (3) to assure the public of a good quality of care, through active peer review and utilization review procedures.

What are the possible advantages of such a concept to the physician? (1) Fee ranges can be established by knowledgeable groups of local physicians, rather than by insurance clerks or government agents. No specific fee schedules are required. (2) The Foundation can act as a "Health Maintenance Organization" under the terms of pending legislation (Bennett Amendment, etc.) and qualify to deal with government for us, where we, as individuals, would be relatively powerless. (3) The public relations advantages would be considerable—i.e., "we as physicians have taken active steps to assure quality of care, through peer review, and to assure better insurance coverage for our patients through economic contractural pressure on our participating insurance carriers." (4) Encouragement of outpatient insurance coverage, and careful utilization review, might help ease some of the hospital bed pressures.

Disadvantages to the physician? (1) There may be much time spent by busy physicians in case review studies. (No objection arises, however, to reimbursement of the physicians by the Foundations for their time.) (2) Limited funding, especially by government, might be used as an excuse for wedging fees downward. Doctor Lewis Dickinson discusses this point, and others on this same topic, on his Insurance Page in this issue of *The Journal* (page 165). (3) Fee "ranges," even if set by large groups of his peers, are not acceptable to everyone. (To this view, one may point out: (a) fee ranges are already set up and used, as we all know, but by *non*-medical personnel; (b) the vast majority of physicians charge reasonable fees, and are the very people most liable to be hurt by the public's backlash to the occasional high-charger; (c) if we don't cooperate and help private insurance do the job, we will be likely to see strict fee lists set up for us by government, with *no* options; and (d) as part of our concern for our fellow man—social consciousness if you will—acceptance of a concept of self-controlled reasonableness in our fees may be simply, and most importantly, the right thing to do.)

Does all this seem familiar here in Kentucky? Shades of the "Prevailing Fee" and Blue Shield "Usual and Customary" turmoil? Well, the road to a medical Foundation is liable to be long and tortuous, but the philosophical content and the practical arrangements seem stimulating enough to warrant this brief introductory note. More, perhaps, later.

WALTER I. HUME, JR., M.D.

ORGANIZATION SECTION

Discussion Of Liability Insurance And Peer Review Are To Be Featured At 1971 KMA Interim Meeting, April 15-16, At Cave City

The 1971 KMA Interim Meeting will feature informative discussion on Liability Insurance, Peer Review, Congressional Health Care Legislation, and Health Care in Kentucky.

The meeting will be held at the Holiday Inn, Cave City, with registration beginning at 8:00 a.m. on April 15.

After opening remarks by John C. Quertermous, M.D., Murray, President of KMA, the meeting will begin with a panel discussion on "Liability Insurance." Moderated by Thornton E. Bryan, Jr., M.D., Cadiz, the panel will also include Riley Lassiter, Louisville, Agent for the Medical Protective Company; and David Powers, Chicago, Director of the Management Services Division, American Medical Association.

The outstanding feature on Thursday evening will be a talk entitled "Congress and Health Care" by Tim Lee Carter, M.D., Tompkinsville, Member of the U.S. House of Representatives from the Fifth District of Kentucky. Doctor Carter will discuss current legislation which will affect health care in the United States.

Friday morning's sessions will begin with opening remarks by John S. Harter, M.D., Louisville, President-Elect of KMA. Following Doctor Harter will be Carl Anderson, M.D., Santa Rosa, California, Chairman of the Board of Trustees, California Blue Shield. His subject will be "Peer Review and the Voluntary System." Next on the program is a panel discussion on "Peer Review in Action," led by Marvin A. Bowers, M.D., Louisville, Chairman, KMA Claims and Utilization Review Committee.

"Health Care in Kentucky" will be the subject of a talk by William P. McElwain, M.D., Frankfort, Commissioner, State Department of Health.

Question and answer sessions will be held both days. Time has also been set aside for use of the recreational facilities at Cave City. These include caves and a museum to visit, a golf course, and a chairlift ride.

Other activities scheduled during the two-day session are a meeting of the Woman's Auxiliary to KMA, as well as a meeting of the KMA Board of Trustees.

All Kentucky physicians are urged by KMA President, John C. Quertermous, M.D., to attend the Interim Meeting and to bring their families. The deadline for making a reservation at the Holiday Inn in Cave City for the night of April 15 is March 25. A reservation form can be found on page 201 of this *Journal* for your convenience.

Kentucky Surgeons Are To Hold Annual Meeting, March 12-13

The Kentucky Chapter, American College of Surgeons will hold its annual meeting, March 12 and 13, at the Health Sciences Center, University of Louisville, according to Truman E. Mays, M. D., Program Committee Chairman.

The two-day meeting will consist of scientific sessions, a surgical residents contest for the best paper presented, and courses on what is new in surgery. Rupert B. Turnbull, Jr., M. D., F.A.C.S., of the Cleveland Clinic, will be the featured speaker.

Also held in conjunction with the meeting will be two symposiums for nurses. Held at the Health Sciences Center on March 12, the symposiums will be for operating room nurses and for emergency room nurses.

On the evening of March 12 there will be a social hour, followed by dinner and a show at the Beef and Boards. Transportation for this event will be furnished.

Ky. OB And GYN Society Plans 23rd Annual Meeting

The 23rd Annual Meeting of the Kentucky Obstetrical and Gynecological Society will be held at the Ramada Inn, Lexington, on April 8-10. The theme will be "Perinatal Problems."

Among the guest speakers are: Harry Fields, M.D., Professor of Obstetrics and Gynecology, University of Pennsylvania, Philadelphia; Charles A. Hunter, Jr., M.D., Professor and Chairman, Department of Obstetrics and Gynecology, Indiana University Medical Center, Indianapolis; and Frank Moya, M.D., Professor and Chairman, Department of Anesthesia, University of Miami.

The Kentucky Obstetrical and Gynecological Society invites all of the members of the Academy of General Practice interested in perinatal problems to attend the meeting. There is no charge for registration. Inquiries should be directed to: Mervel V. Hanes, M. D., 262 Medical Towers South, Louisville, Kentucky 40202.



Doctor Quertermous

Program

"The Physician, the Profession, and the Public"

KMA 1971 Interim Meeting

April 15 and 16

Holiday Inn

Cave City



Doctor Harter

THURSDAY MORNING SESSION
April 15

John C. Quertermous, M.D., Murray, President,

Kentucky Medical Association, Presiding

(All times are Central Standard Time)

8:00 a.m. **Registration**

9:30 a.m. **Call to Order**— Doctor Quertermous

9:45 a.m. **Panel Discussion—"Liability Insurance"**
Thornton E. Bryan, Jr., M.D., Cadiz, Moderator,
KMA Trustee, Third District

Mr. Riley Lassiter, Louisville, General Agent,
Medical Protective Company

Mr. David Powers, Chicago, Director,
Management Services Division, American Medical Association

10:45 a.m. **Coffee Break**

11:00 a.m. **"Medicine's Priorities"**— Harry R. Hinton, Washington, Deputy Director,
Public Affairs Division, American Medical Association

11:30 a.m. **Question and Answer Session for Morning Program**

12:00 noon **Adjourn Morning Session**

Afternoon Free



Doctor Bryan



Mr. Lassiter



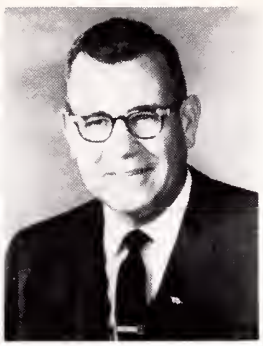
Mr. Powers



Mr. Hinton



Doctor Cantrill



Doctor Carter

THURSDAY EVENING SESSION
April 15

6:00 p.m. Social Hour

6:45 p.m. Invocation— James C. Cantrill, M.D., Georgetown, KMA Trustee, Ninth District

7:45 p.m.—"Congress and Health Care"— Honorable Tim Lee Carter, M.D., Tompkinsville, Member, U. S. House of Representatives

FRIDAY MORNING
April 16

John S. Harter, M.D., Louisville, President-Elect, Kentucky Medical Association, Presiding

9:00 a.m. Call to Order— Doctor Harter

9:15 a.m. "Peer Review and the Voluntary System"— Carl Anderson, M.D., Santa Rosa, California, Member, National Blue Shield Board of Directors

9:35 a.m. Panel Discussion—"Peer Review in Action"

Marvin A. Bowers, M.D., Louisville, Moderator
Chairman, KMA Claims and Utilization Review Committee
Carl Anderson, M.D., Santa Rosa
Faull S. Trover, M.D., Madisonville, Member, KMA Claims and Utilization Review Committee
Walter R. Brewer, M.D., Lexington, Past-Chairman, Claims and Utilization Review Committee, Fayette County Medical Society
Mr. James C. Rogers, Frankfort, Acting Director, Medical Assistance Division, State Department of Health

10:35 a.m. Coffee Break

10:50 a.m. "Health Care in Kentucky"— William P. McElwain, M.D., Frankfort, Commissioner, State Department of Health

11:10 a.m. Question and Answer Session for Morning Program

11:45 a.m. Closing Remarks— Doctor Quertermous



Doctor Bowers



Doctor Anderson



Doctor McElwain

Rheumatic Diseases Symposium Scheduled For April 22

"Advances in Rheumatology" will be the theme of the Seventh Annual Rheumatic Disease Symposium, April 22, at the Health Sciences Center, University of Louisville Medical Center.

Sponsored by the University of Louisville School of Medicine and the Kentucky Chapter of the Arthritis Foundation, this symposium will feature speakers from all over the United States. The program will focus on recent advances in rheumatology, with selected topics including current information on immunologic aspects of rheumatoid arthritis, unusual joint disorders following renal transplants, new approaches to the use of immunotherapy, helpful techniques in the differential diagnosis of various arthritides, and an appraisal of the new total hip arthrophasty procedure.

David H. Neustadt, M.D., Chief of the Section on Rheumatic Diseases, University of Louisville, and Program Director of the symposium, has announced that the conference will consist of morning and afternoon sessions with lectures and panel discussions presented by a visiting faculty. Among the guest faculty are: J. Claude Bennett, M. D., Professor of Medicine and Chairman of the Department of Microbiology at the Medical College of Alabama; Paul Bilka, M. D., Clinical Professor of Medicine, University of Minnesota Medical School; and John Decker, M. D., Chief, Arthritis and Rheumatism Branch, National Institute Arthritis and Metabolic Diseases.

There is no registration fee for the all-day symposium, and it has been approved for six accredited hours by the American Academy of General Practice.

Executive Committee Urges Cooperation In Survey

Physicians throughout Kentucky will soon be receiving a manpower study form which will request specific information concerning medical care in Kentucky. Such items as the number and types of personnel in the physicians' offices will be among the questions included in this survey.

The survey is being conducted under the auspices of the Kentucky Comprehensive Health Planning Council, and the Executive Committee of KMA urges you to answer the questions in the survey and return them as soon as possible. In this manner, it is felt that a true picture of the present medical care facilities in Kentucky can be presented by those most familiar with that health care system.

Anesthesiologists Elect Officers

William E. Hopkins, M.D., Anchorage, was elected president of The Kentucky Society of Anesthesiologists at their January meeting. Jerry A. Phelps, M.D., Louisville, was elected Secretary-Treasurer.

12th Annual Meeting Planned By Industrial Medical Group

The Kentucky Industrial Medical Association will hold its 12th Annual Meeting in Louisville on April 1, according to Gradie R. Rowntree, M.D., Secretary of the group. Scheduled to begin at 3:30 p.m., the meeting will be held at the Ramada Inn, I-64 and Hurstbourne Lane.



Doctor Key

An outstanding feature of the meeting will be a talk on Public Law 91-596, Occupational Safety and Health Act of 1970, by Marcus M. Key, M.D., Assistant Surgeon General and Director, Bureau of Occupational Safety and Health, Department of Health, Education and Welfare.

"Drug Abuse in Industry" will be the subject of William B. Stodghill, M.D., Clinical Assistant Professor of Medicine, University of Louisville School of Medicine, and member of the Board of Directors of the Louisville Drug Abuse Center.

Merle Bundy, M.D., Medical Director, U.S. Steel Corporation, will speak at the dinner session. His topic will be "Occupational Medicine Today and Tomorrow." Doctor Bundy is the national President of the Industrial Medical Association.

Nurses Symposium To Be Held

A symposium for emergency room nurses will be held March 12 in conjunction with the annual meeting of the Kentucky Chapter, American College of Surgeons. The one-day training course will consist of lectures, movies, and demonstrations of techniques that are essential for patient survival and for quality of life after injury.

Held at the Health Sciences Center, University of Louisville, the symposium will be sponsored by the Kentucky Chapter, American College of Surgeons, the Kentucky Medical Association's Committee on Disaster Medical Care and the Jefferson County Medical Society's Committee on Emergency Care and Disaster. There will be a registration fee of $10.00.

AMPAC Workshop Scheduled

The 1971 AMA-AMPAC Public Affairs Workshop will be held at the Washington-Hilton Hotel in Washington, D.C., March 13 and 14. The workshop speakers will be members of the 92nd Congress and various federal agencies.

The meeting will examine both medical legislation and the political challenge for 1971. There will be a special presentation entitled "America Voted and Counted Itself—What We Said." Another address will outline the responsibilities between those in the governmental process and members of the medical profession.

County Medical Societies List Officers For 1971

The following is the second part of a list of county medical society officers for this year, made available by the Membership Department of KMA. The first part of the list can be found in the February issue of *The Journal.*

Cumberland
President: William F. Owsley, M.D., Burkesville
Vice-President: James W. Morris, M.D., Burkesville
Secretary: Joseph Schickel, M.D., Burkesville
Delegate of KMA: Joseph Schickel, M.D., Burkesville

Elliott
President: Brown L. Adkins, M.D., Sandy Hook
Secretary: John F. Greene, M.D., Sandy Hook
Delegate to KMA: John F. Greene, M.D., Sandy Hook
Alternate: Brown L. Adkins, M.D., Sandy Hook

Green
President: Robert P. Simmons, M.D., Greensburg
President-Elect: George C. Cheatham, M.D., Greensburg
Secretary-Treasurer: George C. Cheatham, M.D., Greensburg
Delegate to KMA: Robert L. Shuffett, M.D., Greensburg
Alternate: Kenneth S. DeSimone, M.D., Greensburg

Johnson
President: Franklin K. Belhasen, M.D., Paintsville
Vice-President: Glenn R. Powell, M.D., Paintsville
Secretary-Treasurer: Maurice M. Hall, M.D., Paintsville
Delegate to KMA: Jerry D. Fraim, M.D., Paintsville
Alternate: Glenn R. Powell, M.D., Paintsville

Letcher
President: Harold R. Gillespie, M.D., Whitesburg
Vice-President: Jim B. Tolliver, M.D., Whitesburg
Secretary-Treasurer: Carl Pigman, M.D., Whitesburg
Delegate to KMA: Jim B. Tolliver, M.D., Whitesburg
Alternate: Harold R. Gillespie, M.D., Whitesburg

KENTUCKY MEDICAL ASSOCIATION
INTERIM MEETING, APRIL 15-16, 1971
REQUEST FOR ACCOMMODATIONS RESERVATION

Complete and mail directly to Holiday Inn, Cave City. This reservation is for the night of April 15 ONLY.

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RESERVATIONS SHOULD BE MADE
NO LATER THAN MARCH 25, 1971

Names of those sharing accommodations:

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Name _____

Name _____

Address to which confirmation to be sent: _____
Street Address

City State Zip Code

Return reservation request to: Holiday Inn, Cave City, Kentucky 42127; telephone 502-773-2931.

Note: This reservation is for the Kentucky Medical Association meeting, April 15-16, 1971.

Pulaski:
President: Stephen B. Kelley, M.D., Somerset
Vice-President: Gerald A. Weigel, M.D., Somerset
Secretary-Treasurer: Danny M. Clark, M.D., Somerset
Delegates to KMA: John P. Hill, M.D., Somerset
Stephen B. Kelley, M.D., Somerset
Alternates: Gerald A. Weigel, M.D., Somerset
William O. Massey, M.D., Burnside

Shelby-Henry-Oldham
President: Harold F. Funke, M.D., Crestwood
Vice-President: S. Brooks May, M.D., Eminence
President-Elect: S. Brooks May, M.D., Eminence
Secretary-Treasurer: Rodney Whitaker, M.D., Shelbyville
Delegate to KMA: Ronald Waldridge, M.D., Shelbyville
Alternate: Donald Chatham, M.D., Shelbyville

Warren-Edmondson-Butler
President: Carl E. Rutledge, M.D., Bowling Green
Vice-President: Nelson B. Rue, M.D., Bowling Green
Treasurer: W. G. Begley, M.D., Bowling Green
Secretary: William P. Stone, Jr., M.D., Bowling Green
Delegate to KMA: James O. Willoughby, M.D., Bowling Green
Alternate: Harold Keen, M.D., Bowling Green

Whitley
President: Paul B. Barton, M.D., Corbin
Vice-President: Paul Harrison, M.D., Corbin
Secretary-Treasurer: William T. Daniel, M.D., Corbin
Delegate to KMA: Roemer D. Pitman, M.D., Corbin
Alternate: Elmer G. Prewitt, M.D., Corbin

Ohio
President: Barney E. Elliott, M.D., Beaver Dam
Secretary-Treasurer: Billy R. Allen, M.D., Beaver Dam

Owsley
President: Arnold L. Taulbee, M.D., Booneville
Secretary-Treasurer: Mildred B. Gabbard, M.D., Booneville
Delegate to KMA: Arnold L. Taulbee, M.D., Booneville
Alternate: Mildred B. Gabbard, M.D., Booneville

Pennyrile
President: James B. Cox, M.D., Hopkinsville
Vice-President: Nathaniel H. Talley, M.D., Princeton
Secretary-Treasurer: William N. Richardson, M.D., Cadiz

Perry
President: Adalberto J. Fernandez, M.D., Hazard
Vice-President: Charles Franks, M.D., Hazard
Secretary-Treasurer: Charles C. Rutledge, M.D., Hazard
Delegate to KMA: Keith W. Cameron, M.D., Ary
Alternate: Elmer Ratcliff, M.D., Hazard

Correction

The officers of the Fayette County Medical Society were listed incorrectly in the February *Journal.* The following are the present officers and delegates to KMA:

President: Leslie W. Blakey, M.D., Lexington
Vice-President: Colby N. Cowherd, M.D., Lexington
President-Elect: James B. Holloway, M.D., Lexington
Secretary-Treasurer: James G. Wilhite, M.D., Lexington
Delegates to KMA:
(All of Lexington)

1971

John F. Berry, Jr., M.D.
Peter P. Bosomworth, M.D.
N. Lewis Bosworth, M.D.
T. R. Bryant, M.D.
Winston L. Burke, M.D.
Donald E. Edger, M.D.
Richard B. McElvein, M.D.
Leslie W. Blakey, M.D.

1971-1972

Ted D. Ballard, M.D.
Richard D. Floyd, M.D.
W. Porter Mayo, M.D.
John E. Trevey, M.D.
Richard F. Hench, M.D.

Alternates:
(All of Lexington)
Ward O. Griffen, M.D.
Irving F. Kanner, M.D.
Charles H. Nicholson, M.D.
Ben C. Stigall, M.D.
Carl H. Scott, M.D.

The *Journal* staff apologizes for listing the officers and delegates incorrectly in the February *Journal.*

PHYSICIANS (2), GENERAL MEDICINE
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In Memoriam

GYRLEE T. BALLARD

Harrodsburg

1912-1970

Gyrlee T. Ballard, M.D., 58, a Harrodsburg physician, died December 24. Doctor Ballard attended Centre College and the University of Louisville Medical School. He was a member of the Mercer County Medical Society and the Kentucky and American Medical Associations.

PAUL E. DAVIS, M.D.

Paducah

1923-1971

Paul E. Davis, M.D., 48, a Paducah psychiatrist, died January 19. Doctor Davis, a native of McCracken County, practiced in Paducah for several years, after serving on the staff at Western State Hospital in Hopkinsville. A graduate of the University of Louisville School of Medicine, he served with the U. S. Marine Corps in World War II. Doctor Davis was a member of the McCracken County Medical Society and the Kentucky and American Medical Associations.

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Training Textbook Is Published For Medical Technicians

The American Academy of Orthopaedic Surgeons has published a standard textbook for the training of emergency medical technicians. Entitled "Emergency Care and Transportation of the Sick and Injured," the 320-page volume is designed for use by both student and teacher. It was written by more than 100 contributors and compiled by members of the Academy's Committee on Injuries.

The publication contains 58 chapters and over 200 illustrations, many in color, detailing the practical application of emergency care and rescue techniques. The reader is given a working knowledge of essentially every emergency subject, including fractures, burns, poisons, heart attacks, strokes, explosions, record keeping, vehicle maintenance, and legal responsibilities.

The volume is available at $4.95 prepaid per copy from the American Academy of Orthopaedic Surgeons, 430 North Michigan Avenue, Chicago, Illinois 60611.

Ira L. Hemmings, Jr., M.D., has joined Doctors Maurice Kaufmann and Martin P. Kaplan in practice in Lexington. Doctor Hemmings specializes in pediatrics, with a sub-specialty of allergy. A graduate of the University of West Virginia, he served his residency in pediatrics at the U. S. Naval Hospital in Bethesda, Maryland, and took a fellowship in allergy at the University of Virginia Hospital.

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FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1971 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 21, 22, 23**

Fill Out and Mail to:

BENJAMIN B. JACKSON, M.D., Chairman

Committee on Scientific Exhibits

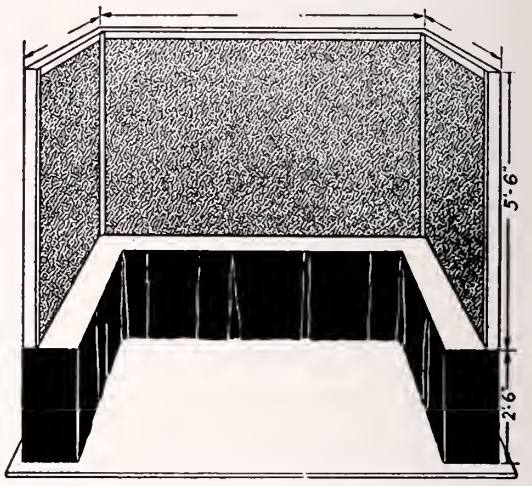
Kentucky Medical Association

3532 Ephraim McDowell Drive

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1971.

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit:
2. Name (s) of Exhibitor (s):

 Institution (if desired):

 Mailing Address:
3. Do you have a built-in exhibit?
4. Description of Exhibit: (Attach brief description not to exceed 50 words to this blank.)
5. Exhibit will consist of the following: (check which)

 Charts and Posters.... Photographs.... Drawings.... X-rays

 Specimens.... Moulages.... Other Material.....
 (Describe)
6. Booth Requirements:

 Amount of total wall space needed?

 Back wall?

 Shelf desired? (yes or no)
7. Indicate sources of assistance provided to you in connection with the exhibit.

8. Has this exhibit been exhibited before? If so, when & where?

Date

Signature of Applicant

The Kentucky Medical Association will provide, without cost to the exhibitor, the following: exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the Committee on Scientific Exhibits.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor, as well as cost of cards, signs, etc. which are a part of the exhibit.

View boxes, furniture, decorations, etc. may be rented, if desired, by applying to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202, who supply equipment for the KMA Annual Meeting.

Due to the shortage of space, please have your exhibit as compact as possible.



Campbell's Soups... wide variety...for limited appetites

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Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Even patients on special diets will find soups they can enjoy among the more than 50 different varieties available.



Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

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75 million more Americans—what impact on health care?

Because of a declining birthrate in the United States—attributable in no small measure to the widespread use of contraceptives—our population in thirty years is expected to be *only* 280 million, while the world population is expected to double, reaching 7 billion.

But the word "only" has an ironic ring to ecologists who warn of cities resembling overcrowded, contaminated rat colonies, of respiratory and mental diseases reaching epidemic proportions and of a health-care community virtually overwhelmed by the burden.

The global consequences may be no less devastating. Ecologists estimate that every American has roughly fifty times the negative impact on the Earth's life-support systems of, say, a citizen of India. In these terms, adding 75 million Americans would be equivalent to adding 3.7 billion Indians to the world population.

**For the complete brochure, and others in the series as they appear, please write to Searle or ask your Searle representative.* Explored in the forthcoming issues will be the role of birth control on family pressures and its effects on the family; the influences of poverty, ethnic factors and marital status; its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

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Demulen...for low estrogen and Searle's progestin...with its unsurpassed contraceptive effectiveness and low incidence of side effects...with simple "Sunday-starting" and patient-proof Compack® tablet dispenser.

Actions—Demulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Demulen depresses the output of both the follicle-stimulating hormone (FHS) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain [1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted; anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

1A2

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Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.
Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.
Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.
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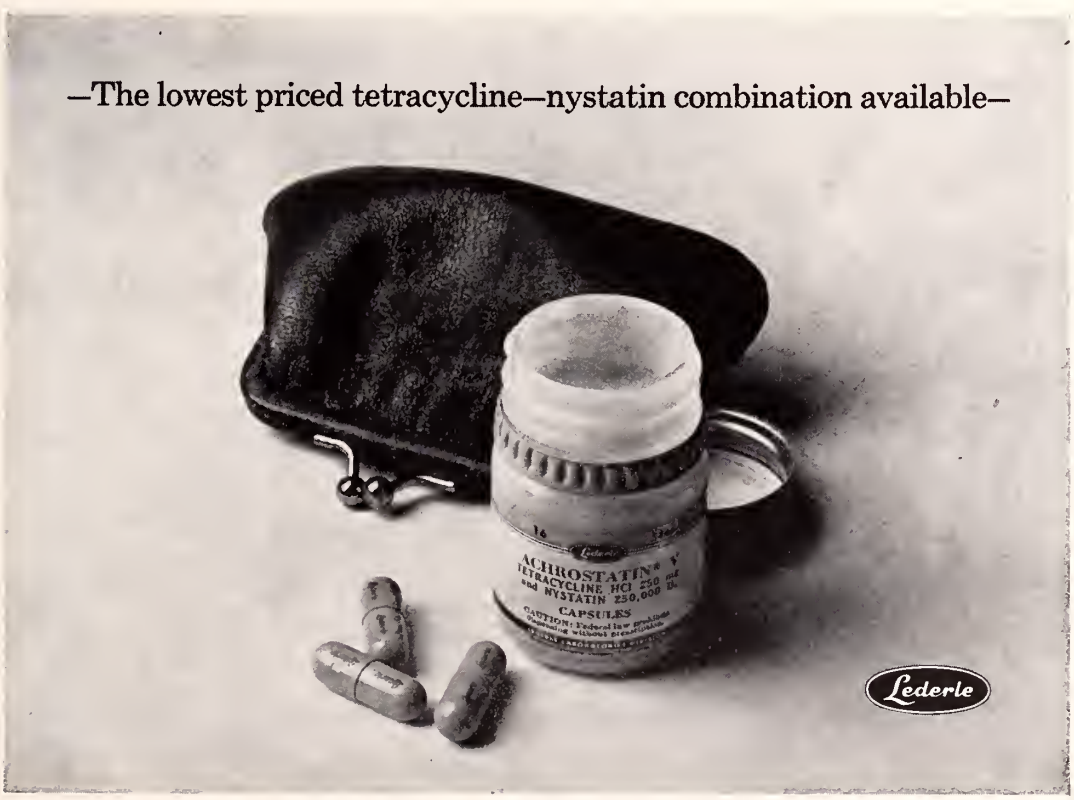
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Southern Optical

CHARGE ACCOUNTS INVITED
BankAmericard
Master Charge

—The lowest priced tetracycline–nystatin combination available—



When irritable colon feels like this



The blowfish, a small species of fish, reacts to stress or fright by puffing itself up wit air. After about a dozen noisy gulps the belly is balloon shaped and hard. When replaced in the water the air quickly expelled, and the fish sinks to the bottom.

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

☐ belladonna alkaloids—for the hyperactive bowel ☐ simethicone—for accompanying distension and pain due to gas ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent


Gone with the wind

The gas/acid group of disorders

"The two most common complaints referable to the upper gastrointestinal tract for which patients seek medical relief are hyperacidity and 'gas.' The two often occur together."*

Frees captured gas...neutralizes free acid

SILAIN-GEL Tablets and Liquid are separate formulas designed to provide equivalent dual-action symptomatic relief. Both dosage forms contain simethicone which effectively frees trapped gas, enabling the patient to eliminate it. Magnesium hydroxide in both assures a rapid rise in pH for prompt relief of hyperacidity. The special co-dried aluminum hydroxide/magnesium carbonate gel in the tablets assures the same rapid and uniform reaction rate as the liquid. Thus, both medications achieve prompt and prolonged neutralization of free acid *plus* prompt relief from the pain and pressure of trapped gas.

Always in good taste

The pleasant, distinctive flavor of SILAIN-GEL, as well as its non-constipating feature, make it a therapy your patients can live with—in comfort and without complaint.

Select the form of SILAIN-GEL you want to provide symptomatic relief in: gastric ulcer • duodenal ulcer • heartburn • gastric hyperacidity • gastritis • dyspepsia

when the patient prefers the convenience of a tablet, select

Silain-Gel® Tablets:

when the patient prefers a liquid, select

Silain-Gel® Liquid

Also available for the patient who needs an antifrothicant/antiflatulent agent only: **Silain®** (simethicone) Tablets

*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

Announcing the "Antgasid"

Silain-Gel®

Tablets: simethicone plus aluminum hydroxide/magnesium carbonate co-dried gel and magnesium hydroxide

Liquid: simethicone plus aluminum hydroxide and magnesium hydroxide

one dose does both: frees captured gas...neutralizes free acid

A·H·ROBINS A.H. Robins Company, Richmond, Virginia 23220

sterile solution (300 mg. per ml.)

Consider Lincocin®

(lincomycin hydrochloride, Upjohn)

and single-dose 2 m
disposable syringe

For your convenience
in 2 ml. and 10 ml. vials...



©1970 by The Upjohn Company JA70-9835 MED B-4-S (KZL-5)

Upjohn THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN 4

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin'®

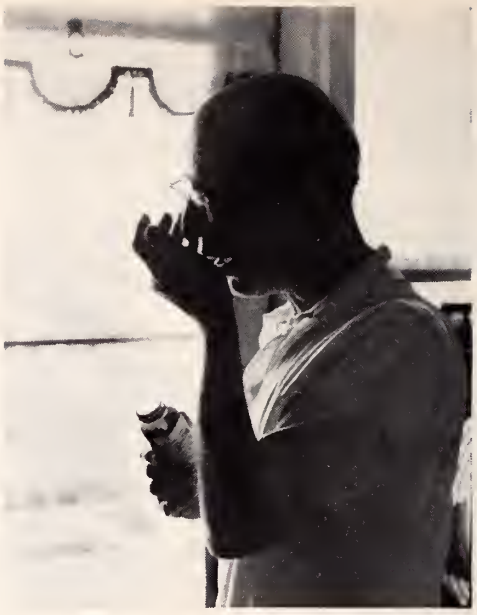
Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

'B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.



Multivitamins with pyridoxine can impair levodopa therapy

Your patient with Parkinson's disease and syndrome may be taking a nonprescription multivitamin containing B_6.
Vitamin B_6 reportedly reduces the benefits of levodopa, and may lead to discontinuance of therapy because of apparent ineffectiveness.

Larobec provides needed nutritional support without pyridoxine (vitamin B_6)...and helps ensure that your levodopa therapy is not impaired by self-medication with a pyridoxine-containing multivitamin preparation.

Complete Prescribing Information:
Each Larobec tablet contains:

Thiamine mononitrate (vitamin B_1)	15 mg
Riboflavin (vitamin B_2)	15 mg
Niacinamide	100 mg
Calcium pantothenate	20 mg
Cyanocobalamin (vitamin B_{12})	5 mcg
Folic acid	0.5 mg
Ascorbic acid (vitamin C)	500 mg

Description: For prophylactic or therapeutic nutritional supplementation concomitant with levodopa therapy in patients with Parkinson's disease and syndrome, Larobec provides high potency dosages of the major B-complex vitamins, without pyridoxine (vitamin B_6) which has been reported[1,2] to reduce the clinical benefits of levodopa therapy. B-complex vitamins are essential in the anabolism of carbohydrate and protein and in hematopoiesis. Larobec also contains therapeutic quantities of ascorbic acid, a substance involved in intracellular reactions such as tissue repair and collagen formation.
Indications: Larobec is indicated for supportive nutritional supplementation when a water-soluble vitamin formula (without pyridoxine) is required prophylactically or therapeutically in patients under treatment with levodopa.
Warning: Administration of vitamin B_6 may be required if signs of pyridoxine deficiency develop. Larobec is not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.
Dosage and Administration: One or two tablets daily, as indicated by clinical need.
How Supplied: Orange-colored, capsule-shaped tablets, imprinted Roche 73; bottles of 100.
References:
1. Duvoisin, R. C., *et al.*: *Trans. Amer. Neurol. Assoc., 94*:81, 1969. 2. Cotzias, G. C.: *J.A.M.A., 210*:1255, 1969.



The "incomplete" B-complex

Larobec™
TABLETS

High-potency nutritional support under prescription control

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

When Constipation is a Concern . . .



Consider

DOXIDAN® The Logical Laxative

(laxative with stool softener)

Doxidan relieves constipation:

- **gently**—minimal laxative side effects
- **predictably**—overnight results
- **conveniently**—one or two capsules at bedtime
- **economically**—costs less per effective daily dose*

Composition: Each capsule contains 50 mg. danthron N.F. and 60 mg. dioctyl calcium sulfosuccinate. Supplied: Bottles of 30, 100 (FSN 6505-074-3169) and 1000 (FSN 6505-890-1247) and Unit Dose 100's (10 x 10 strips).

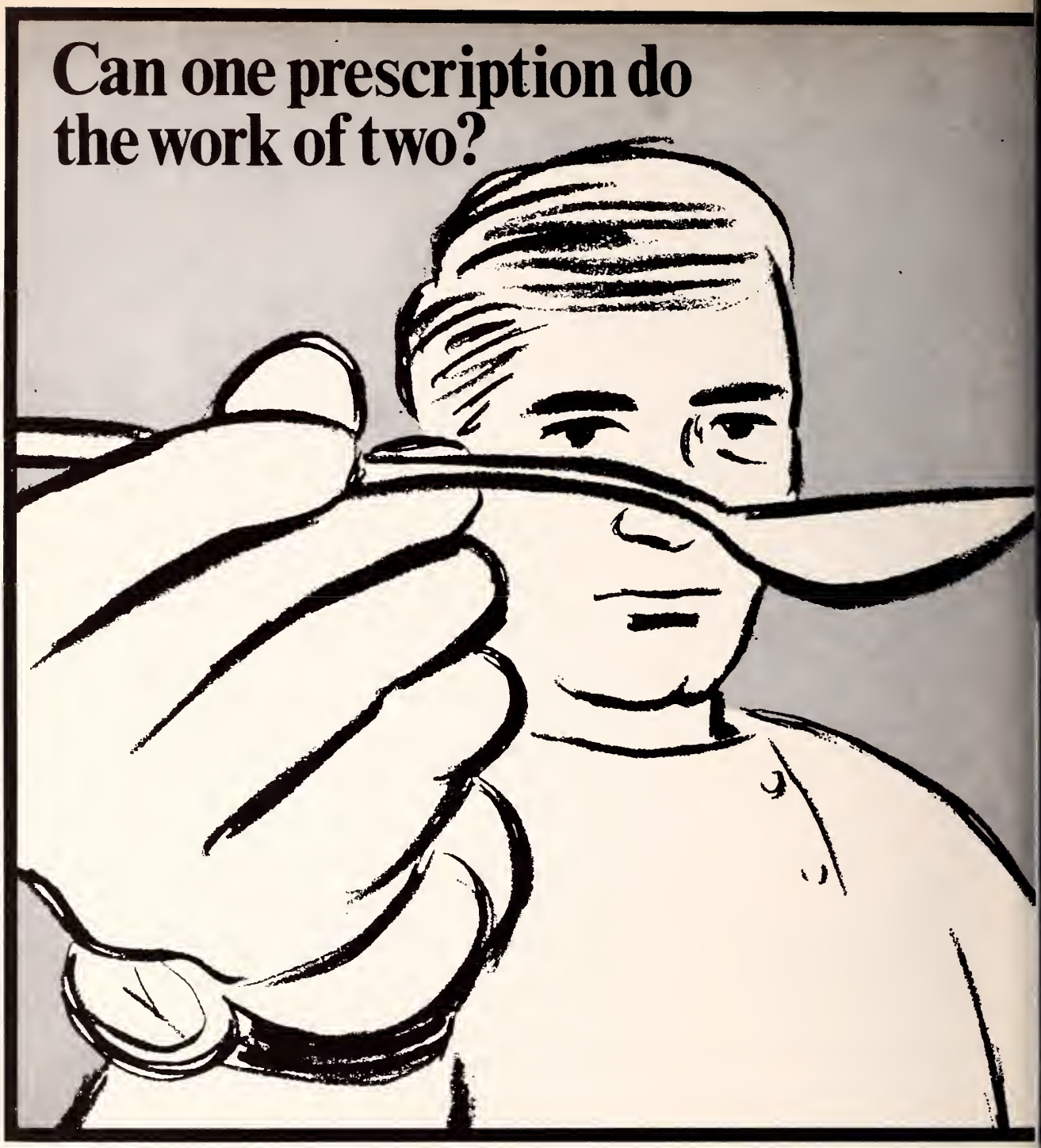


*based on actual drug store survey of prescribed dosages

HOECHST
PHARMACEUTICAL CO.
Somerville, N.J. 08876 U.S.A.

C-168

Can one prescription do the work of two?



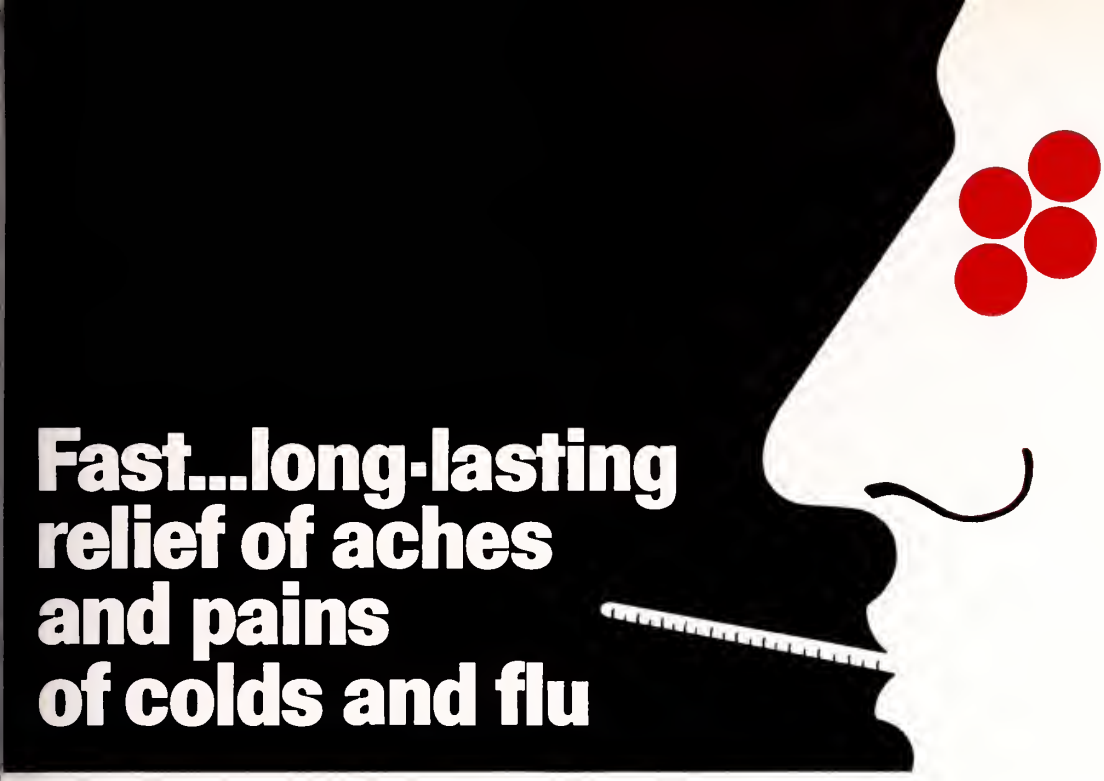
Yes, Kolantyl®.

Kolantyl Gel/Wafers contain aluminum hydroxide/magnesium hydroxide, and Bentyl® (dicyclomine hydrochloride) too.

Merrell

The Wm. S. Merrell Company
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

0-2572 (21721)



Fast...long-lasting relief of aches and pains of colds and flu

with the unique timed-release aspirin

Double strength Measurin timed-release aspirin offers a new kind of control for your patients with cold and flu discomforts. In each 10-grain tablet are over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means fast relief of symptoms, followed by hours of comfort. Throughout the day, Measurin gives your patients freedom from a 4-hour aspirin schedule. During the night, its 8-hour dosage schedule holds the promise of sound sleep without awakening to take extra tablets.

For Professional Samples write:
Breon Laboratories Inc.
Sample Fulfillment Division
P.O. Box 141
Fairview, N.J. 07022

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Subsidiary of Sterling Drug Inc.

MEASURIN®
TIMED-RELEASE ASPIRIN

ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF

Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief, 2 tablets at bedtime.

Available: Bottles of 12, 36 and 60 tablets.

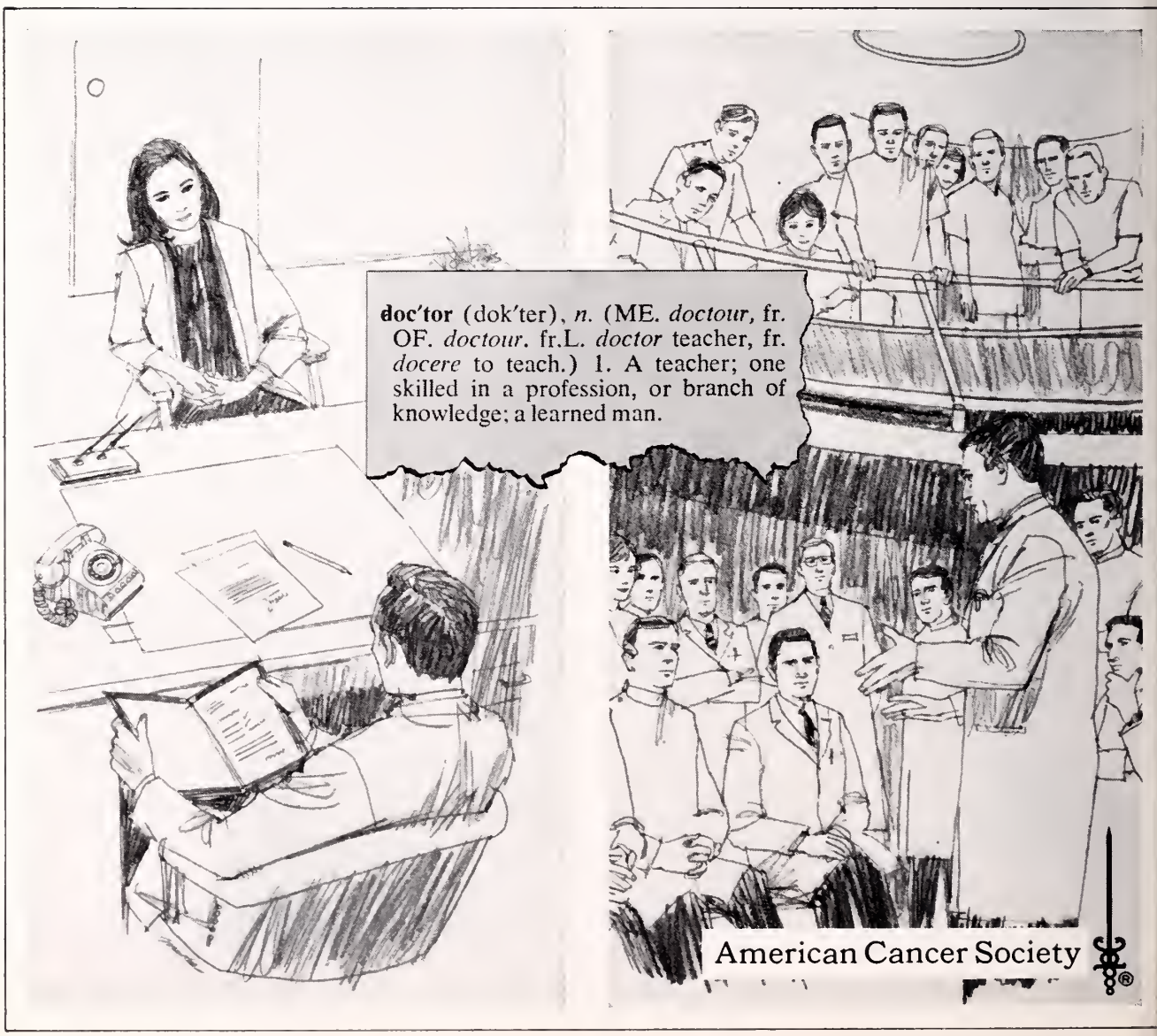
The Doctor

One of the doctor's most important roles is in education.

For his patients, the physician provides the facts, supplies the rationale, triggers the action for life-saving health practices. To his students, he passes on his knowledge and the benefits of his clinical experience. With his colleagues, he shares new information and concepts.

Assisting the doctor in his teaching role is a major function of our professional education program. Through medical conferences, films, exhibits, pamphlets, monographs and other publications, we provide him with the most important and current information on cancer.

If, as Henry Brooks Adams speculated, "A teacher affects eternity; he can never tell where his influence stops", the outlook is optimistic.



Someone acutely ill needs this bed.



It's available because of Medicenter.

Because of Medicenter, this hospital bed can be used by someone who needs it. That's what Medicenter is all about. A recuperative care facility specializing in the needs of patients who no longer require the intensive care of a general hospital and who are on the road to recovery.

But that's only part of the Medicenter story . . . Beautifully carpeted and draped patient rooms, tasty foods, recreation facilities, physical and inhalation therapy are just a few of many luxurious health care features that make recovery in the Medicenter as pleasant and rapid as possible. The Medicenter is within minutes of acute care facilities. A professional medical staff supervises all recuperative care under the direct orders of each patient's personal physician. Room rates are nominal — about one-half the cost of general hospitals. And there's a growing list of insurance companies that already provide coverage for Medicenter recuperation.

The Medicenter is a vital addition to our community's health care system. Get to know the Medicenter soon. Your visit or inquiry is welcome anytime.

MEDICENTER OF AMERICA

A Nice Place to Get Well

Medicenter of America / Hopkinsville • Louisville, Kentucky

Efudex®
(fluorouracil)
cream/solution

In the treatment of solar/actinic keratoses –
An alternative to cold, fire and steel

2/23/68
Before treatment with 5% 5-FU cream. Patient R. G., 78 years old, shows extensive skin changes due to weathering and severe solar/actinic keratoses.

3/26/68
Following one month of therapy. Intense erythematous reaction is seen at sites of keratoses. Normal skin has not reacted. Some areas which had reacted initially have undergone healing despite continued topical application of 5% 5-FU.

6/11/68
Ten weeks after discontinuance of therapy. All areas have healed completely. Residual mild erythema remains in some areas. This patient also had seborrheic keratoses which, as expected, have not reacted. There is no evidence of residual lesions or recurrences.



ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N J 07110

An alternative to conventional therapy

Efudex (fluorouracil) offers the physician a topical alternative to cryosurgery, electrodesiccation and cold-knife surgery in the treatment of solar/actinic keratoses. It is effective, comparatively inexpensive and especially well suited for treatment of these multiple lesions. Important, too, is the highly desirable cosmetic result. Clinical experience demonstrates that treatment with Efudex results in an extremely low incidence of scarring.*

Highly effective

In clinical trials, depending on the dosage form and strength used, complete involution occurred in 77 to 88 per cent of lesions following treatment. The rate of recurrence was low, ranging from 1.7 to 5.6 per cent up to a year after completion of therapy. When new lesions appeared, repeated courses of Efudex therapy proved effective.*

Predictable therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two or three months before gradually receding. Since this response is so predictable, lesions which do not respond should be biopsied.

Two strengths—two dosage forms

Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, two important considerations: First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann - La Roche Inc., Nutley, New Jersey.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Efudex Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)-aminomethane, hydroxy propyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing-cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

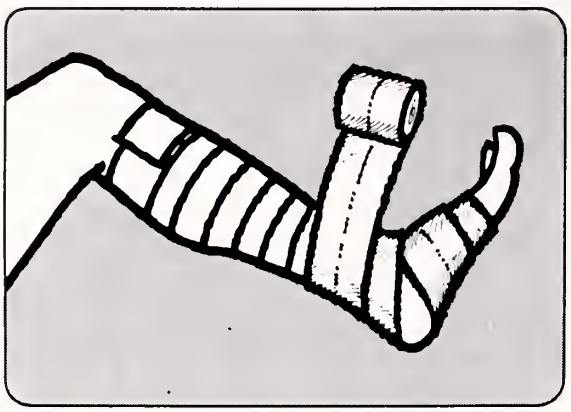


new
Efudex®
(fluorouracil)
cream/solution

PRIMER®

PLUS

Flexoplast®



A practical, ambulatory treatment for leg ulceration

The Flexible Cast: The PRIMER medicated bandage, in conjunction with the FLEXOPLAST elastic adhesive bandage, comprise the cast.

This is a more comfortable and faster method of healing than Unna's Boot. Frequent changing of the dressing is eliminated. The newly forming granulation and epithelium are left undisturbed. It is the modern form of treatment.

EDWARD TAYLOR Ltd.
A Division of Glenwood Laboratories Inc.
Tenafly, New Jersey 07670

Gentlemen:

Please send me

☐ literature

☐ samples of PRIMER medicated bandage and FLEXOPLAST elastic adhesive bandage.

Name M.D.

Address

City

State Zip

New Nilcol- A Comprehensive Formula:

DESCRIPTION	Contents in mg Tablet	Elixir—each 15 ml
phenylpropanolamine HCl	50	25
chlorpheniramine maleate	4	2
glyceryl guaiacolate	200	100
dextromethorphan HBr	30	15
alcohol		10%

The scored, elliptical tablet is light violet. The elixir is deep violet in color and grape-flavored.

ACTIONS Each component of Nilcol has been selected to provide symptomatic relief of congestion and cough in upper respiratory disorders.

Phenylpropanolamine hydrochloride is a vasoconstrictor which reduces congestion of the nasopharyngeal mucosa. Chlorpheniramine maleate, a widely used antihistamine, helps to control allergic symptoms. The expectorant is glyceryl guaiacolate which helps to increase the secretion and decrease the viscosity of fluids of the respiratory tract. Dextromethorphan is a well-known, centrally acting antitussive. Nilcol may minimize the need for topical decongestants.

INDICATIONS Nilcol is indicated for nasal and bronchial congestion; coughs and other symptoms of respiratory infections including influenza and the common cold; other respiratory conditions such as sinusitis, allergic rhinitis or hay fever.

CONTRAINDICATION Hypersensitivity to any ingredient.

PRECAUTIONS Because of the possibility of drowsiness, patients should be cautioned against driving and operating machinery. Administer with caution to patients with hyperthyroidism, hypertensive cardiovascular disease, diabetes mellitus and liver disease. Use in pregnancy is not recommended.

ADVERSE REACTIONS Anxiety, restlessness, tension, insomnia, tremor, weakness, headache, vertigo, sweating, nausea, and vomiting may possibly occur.

SUPPLIED Tablets in bottles of 100. Elixir in bottles of 32 fl oz (1 qt) with dosage cups. N-GP-11-4C

WARNER-CHILCOTT
Morris Plains, New Jersey 07950

This is a test of this publication's advertising "Exposure." Please see below.

Introducing The Fully Therapeutic "Age-Calibrated" Non-Narcotic Cough/Cold Formula... For Any Member Of The Family*

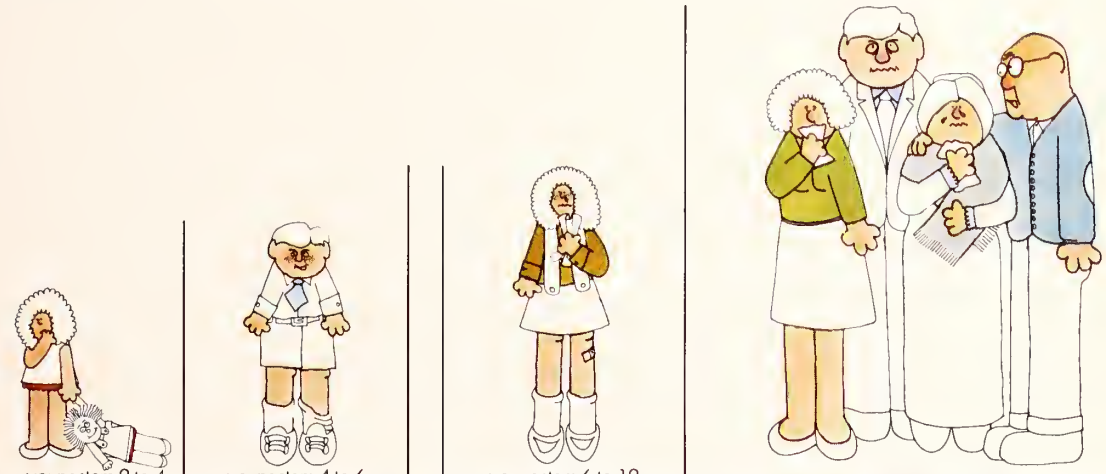
*Not for infants under 2 yeors of oge.

New Nilcol™ Rx Tablets/Elixir

Eoch scored toblet contoins: Phenylproponolomine HCl 50 mg, Chlorpheniromine moleote 4 mg, Glyceryl guaiacolate 200 mg, Dextromethorphan HBr 30 mg.
Eoch 15 ml of elixir contoins: Phenylproponolomine HCl 25 mg, Chlorpheniromine moleote 2 mg, Glyceryl guoiocolote 100 mg, Dextromethorphon HBr 15 mg, olcohol 10%.

An Expectorant • An Antihistamine A Decongestant • A Non-Narcotic Antitussive

For a complimentary package, send your Rx with the name Nilcol written on it to:
Warner-Chilcott Laboratories, 201 Tabor Road, Morris Plains, New Jersey 07950.
Att: M. Adams, St.J.



	youngsters 2 to 4	youngsters 4 to 6	youngsters 6 to 12	grown-ups
Prescribe 3 or 4 times doily				
Quick-Snop-Apart **Tablets**			½ toblet	one toblet
Delicious, Grape-Flavored **Elixir**	5 ml (1 tsp) †	10 ml (2 tsp)	½ oz (1 tbs)	1 oz (2 tbs)
Rx (4 doys — no-woste theropy)	3 oz	6 oz	8 oz	16 oz

†Plus "Age-Colibrated" Medicine Cup for Precision-Assured Dosage.



"Around the World in 80 Days"...

. . .An expense-paid trip with one hitch -- a 60-day hitch in a South Viet Nam civilian hospital delivering vitally needed medical care to the people of South Viet Nam.

American physicians are urgently needed, especially general practitioners, general surgeons, internists, ophthalmologists, orthopedic surgeons, pediatricians, and preventive medicine specialists.

For further information please write to:

Program Director
Volunteer Physicians for Viet Nam
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

Clinical supply available to physicians.

WILLIAM P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

Nothing new about Synirin other than ...it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

Synirin®

ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

ETHICAL ANALGESIA (economical if prescribed in 100 units with privilege of refills)

PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

EACH UNCOATED TABLET CONTAINS:

Aspirin 325 mg. (5 gr.)
Pentobarbital* 8 mg. (1/8 gr.)
*May be habit forming.

Federal law prohibits dispensing without prescription

DISPENSED IN BOTTLES OF 100 AND 1000 TABLETS

WILLIAM P. POYTHRESS & COMPANY, INC.
RICHMOND, VIRGINIA 23261
Manufacturers of Ethical Pharmaceuticals Since 1856

A clinical supply of this new aspirin formulation may be requested.

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

works on the appetite not on the 'nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. *Sympathomimetic cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenamena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-103 / 2/71 / U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Informotion—Composition: Eoch white, beveled, compressed toblet contoins: Quinine sulfote, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention ond treotment of nocturnol and recumbency leg muscle cromps, including those ossocioted with orthritis, diobetes, varicose veins, thrombophlebitis, orteriosclerosis and stotic foot deformities. **Contraindications:** QUINAMM is controindicoted in pregnoncy because of its quinine content. **Precautions/Adverse Reoctions:** Aminophylline moy produce intestinol cromps in some instances, and quinine moy produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbonce. Discontinue use if ringing in the ears, deafness, skin rosh, or visual disturbonces occur. **Dosoge:** One toblet upon retiring. Where necessory, dosage may be increosed to one toblet following the evening meol ond one tablet upon retiring. **Supplied:** Bottles of 100 and 500 toblets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Quinamm™
(quinine sulfate 260 mg., ominophylline 195 mg.)

Specific therapy for night leg cramps

POST-GRADUATE SYMPOSIUM ON RHEUMATIC DISEASES

Amphitheater, Health Science Center **APRIL 22, 1971** Louisville Medical Center

Preston & Walnut Streets

SPONSORED BY THE UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE AND THE KENTUCKY ARTHRITIS FOUNDATION

TOPIC: "ADVANCES IN RHEUMATOLOGY"

This symposium will emphasize recent advances in rheumatology with selected topics including current information on immunologic aspects related to rheumatoid arthritis, new knowledge on joint disorders following renal transplants, discussions of the use of immunotherapeutic agents, physical and radiographic techniques helpful in the differential diagnosis of various forms of arthritis, and an assessment of 2-years experience with the new surgical approach of total hip replacement. Particular attention will be given to those aspects relevant to the practicing physicians. Panel discussions with audience participation will conclude morning and afternoon sessions.

J. CLAUDE BENNETT, M.D.: Birmingham, Alabama	*Rheumatoid Arthritis: Immunopathology and Immunosuppressive Therapy*
PAUL J. BILKA, M.D.: Minneapolis, Minnesota	*Physical Examination of the Arthritic: Practical Hints*
JOHN L. DECKER, M.D.: Bethesda, Maryland	*Overlap Syndrome: Diagnosis and Management*
EVELYN V. HESS, M.D.: Cincinnati, Ohio	*Immunotherapy in Rheumatic Disorders*
ROBERT IRBY, M.D.: Richmond, Virginia	*Joint Manifestations Observed with Renal Transplants and Hemodialysis*
ALEX NORMAN, M.D.: New York, New York	*The Radiographic Diagnosis of Osteoarthritis and Related Disorders*
LOWELL F. A. PETERSON, M.D.: Rochester, Minnesota	*Current Experience with the Charnley Total Hip Arthroplasty*

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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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The Journal of The KENTUCKY Medical Association



COLLEGE OF PHYSICIANS OF PHILADELPHIA APR 22 1971

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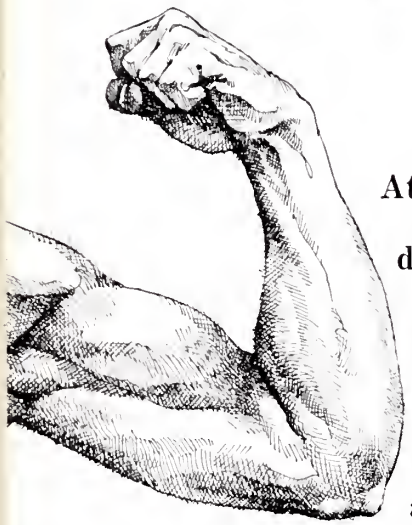
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IF MORE MEN CRIE



At least seventy-five out of one hundred adults with duodenal ulcers are men.[1] Why? It may be significant that duodenal ulcer patients tend to crave recognition and are "especially vulnerable to threats to their manly assertive independence."[2]

Hypersecretion—an atavistic response. Stewart Wolf, who, with Harold G. Wolff, studied the personalities of duodenal ulcer patients, wonders if masculine competitiveness is related to "an atavistic urge to devour an adversary." It is striking, he reports, that an accentuation of gastric acid secretion and motility can be "induced in ulcer patients by discussions that arouse feelings of inadequacy, frustration and resentment."[2]

By chance? A lean, hungry lot. Was the link between emotions and gastric hyperacidity acquired through mutation to serve a purpose? During man's jungle period of evolution, the investigator points out, a male dealt with a foe by killing and devouring it. "It may be more than coincidence," he concludes, that peptic ulcer patients appear to be "a lean, hungry, competitive lot."[3]



Big boys don't cry. If more men cri
maybe fewer would wind up with duode
ulcers. But men will be men—the sum tota
their genes and what tl
are taught. Schottsta
observes that whe
mother admonishes
son who has hurt hims
that big boys don't cry,
is teaching h
stoicism.[4] Crying is
negation of everythi
society thinks of as mar
A boy starts defending
manhood at an early a



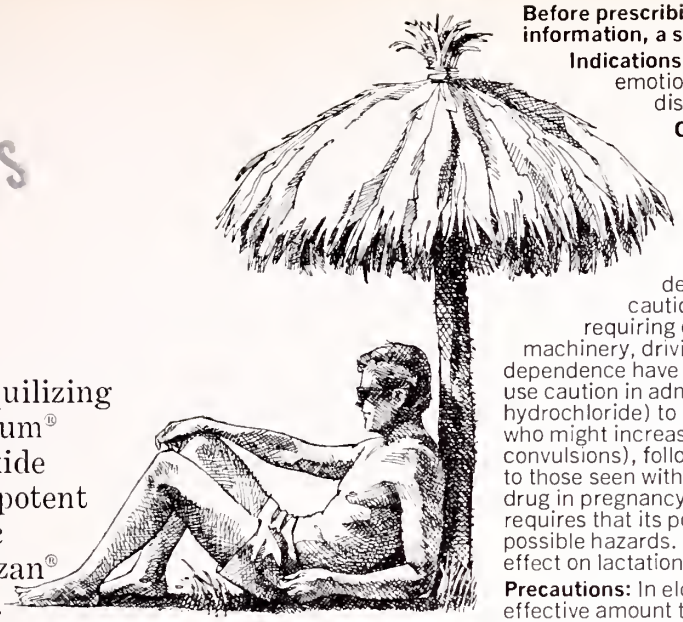
**Take away stre
you can take away symptor**

There is no question that stress play
role in the etiology of duodenal ulc
Alvarez[5] observes that many a man with
ulcer loses his symptoms the day he shuts
the office and starts out on a vacation. T
problem is, the type of man likely to have
ulcer is the type least likely to take lo
vacations or take it easy at work.

The rest cure vs. the two-way action Librax.® For most patients, the rest cure as unrealistic as it is desirable. Still, t stress factor must be dealt with. And he is where the dual action of adjunctive Libr can help. Librax is the only drug that co

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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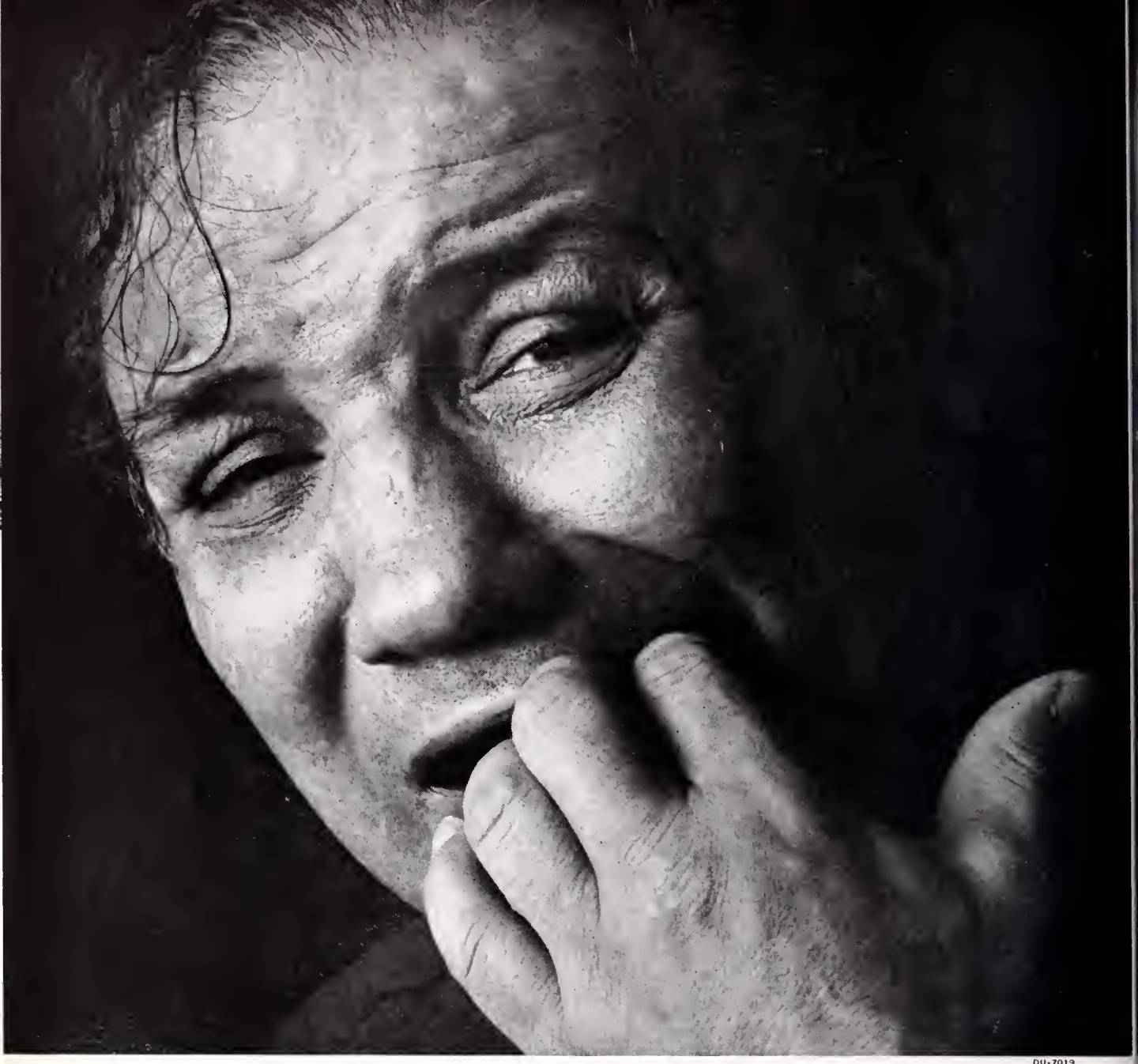
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MESSAGE FROM THE PRESIDENT



Growing Pains

I have just returned from the AMA-AMPAC Seminar and the KMA Congressional Dinner in our Nation's Capitol. I note with interest and sincere pleasure the growing interest of physicians in our changing world. Those of us from Kentucky observed with pride as our own Hoyt D. Gardner, M.D., new Chairman of the AMPAC Board, performed in a superb fashion as he presided over the AMA-AMPAC meeting and planned our own function.

Indeed, we are experiencing great and meaningful growing pains within KMA. I doubt that there is a physician in Kentucky who recognizes the many services KMA provides for him, his patients, and for the general good of the Commonwealth . . . and he really shouldn't. KMA does many things for you in your daily life that you can just never relate to your professional organization. It might be the "Hospital" sign you see on the highway, a TV program, a child visiting you for an immunization, a continuing increase in quality medical care, teams to help your hospital, new physicians educated with KMA assistance, and on and on I could go. The things you know your Association performs and transacts represent a small percentage of the services actually received by you, the profession, and the public.

These multiplying activities and programs naturally demand more staff to get the job done and a larger Headquarters building in which to do it. These are both under pursuit at the present time.

Why all these growing pains? My answer is YOU . . . your interest, your knowledge of our needs, your desire to improve the profession, your wishes to serve the public, your understanding of the challenges we face, your hopes for better health care, and your faith in your colleagues to guide KMA in the right direction . . . plus the pride we have in maintaining a leadership role nationally for our accomplishments within the Kentucky Medical Association.

You can be proud, because the goal is reached by your individual efforts, your collective efforts, and through your staff. You have a right to be proud of your KMA as it serves you as an individual, the profession, and the public. Growing pains are good. It proves we're a great deal more than just alive in Kentucky.



Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

APRIL

15-16 KMA Interim Meeting, Holiday Inn Motel, Cave City

21 Spring Meeting, Kentucky Psychiatric Association, 10:00 a.m., "Sleep and Dreaming," William G. Drew, M.D., Campbell House, Lexington; dinner, Mr. Joe Creason, Spindletop.

22 Postgraduate symposium on rheumatic diseases, "Advances in Rheumatology," sponsored by the University of Louisville School of Medicine and The Kentucky Arthritis Foundation; Health Sciences Center, University of Louisville; no registration fee; six accredited hours, American Academy of General Practice

22 Lecture on Tolbutamide Therapy, Harvey Knowles, M.D., Professor of Medicine, University of Cincinnati; sponsored by Kentucky Diabetes Association; held at 4:00 p.m., Room MN 263, Albert B. Chandler Medical Center, Rose Street, Lexington

26 PANMED television series, "Immediate Post Operative Fitting of the Amputee," KET 10:30 p.m. EST (9:30 p.m. CST)

28-30 Symposium on Inflammatory Diseases of the Gastrointestional and Biliary Tracts, Albert B. Chandler Medical Center, Lexington. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

29 Spring Meeting, Kentucky Chapter, American College of Radiology, Continental Inn, Lexington

MAY

4-6 20th Annual Assembly and Scientific Session, Kentucky Chapter, Academy of General Practice, Seelbach Hotel, Convention Center, Louisville

8 Annual Meeting, Kentucky Society of Internal Medicine, Kentucky Dam Village Lodge, Board of Governors meeting, 5:00 p.m., banquet, 7:00 p.m.

12-13 Spring Meeting, Kentucky Chapter, American Academy of Pediatrics, Bellefonte Country Club, Ashland

14 Postgraduate course, "New Approaches in Cancer Therapy," a symposium designed to explore those areas of cancer therapy where new approaches have significantly altered treatment; fee $25. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

14-15 Meeting, Kentucky Surgical Society, Lake Cumberland State Park, Jamestown

19-21 Postgraduate course, "Ambulatory Care of Children," for professionals who care for children; fee $75. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

24 PANMED television series, "The Transient Ischemic Attack," KET 10:30 p.m. EST (9:30 p.m. CST)

31 PANMED television series, "Physical Fitness and the Athlete," KET 10:30 p.m. EST (9:30 p.m. CST)

IN SURROUNDING STATES

APRIL

14-15 Postgraduate course, "Anesthesiology Symposium," Cleveland Clinic Educational Foundation, Cleveland, Ohio

17-18 23rd Annual Lectures in Diagnostic Radiology, University of Cincinnati College of Medicine, Cincinnati, Ohio

MAY

12-13 Postgraduate course, "Advances in Dermatology," Cleveland Clinic Educational Foundation, Cleveland, Ohio

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can to avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.



THE INSURANCE PAGE



Diagnostic Hospital Admissions

During the first week in March this year, each doctor in Kentucky received a letter from the Chairman of the Advisory Committee to Blue Cross. This letter discussed the purpose and broad duties of the Advisory Committee; and it contained an enclosure which explained that most Blue Cross policies do not cover diagnostic admissions. It was also explained that certain hospital admissions for acute painful illness require diagnostic studies to rule out conditions that might require surgery or more extensive treatment. Although diagnostic in nature, these hospitalizations are covered by Blue Cross.

Apparently Blue Cross finds that there is extensive abuse of the diagnostic admission. Undoubtedly this is a very expensive item in their budget.

Many years ago the writer was asked by a patient if it were true that certain doctors could obtain hospital insurance benefits for the patient better than others. At the time, I thought that this patient was implying that Blue Cross favored some physicians over others, or that Blue Shield officials could get claims paid where others could not. Over the years I have come to realize that this patient was implying that some doctors might possibly diagnose and treat disease which is covered by the insurance policy rather than list the true diagnosis which might not be covered by the insurance policy.

The writer recalls that Edmond K. Hall, M.D., who for many years was a Professor of Anatomy at University of Louisville School of Medicine, often stated, "A doctor should be intellectually honest." By this, he meant that one should be honest for honesty's sake; and the fear of being caught should not influence one's position on honesty.

Undoubtedly, more patients than doctors have a desire to obtain insurance benefits to which they are not entitled. If all physicians took the time to explain to the patient that diagnostic admissions are not covered, there would be less misunderstanding on this subject. The doctor should not be concerned with trying to interpret the patient's insurance policy and should not be concerned if the patient, or a third party, pays the hospital bill.

Apparently it is common with some doctors to conceal information from the insurance company. They may tend to rationalize this action by saying that the insurance company is taking advantage of the patient or that the patient has been misled about the benefits of his policy. If this is so, it should be corrected by revision of the insurance laws or by action of the insurance commission. It is not the doctor's job to try to obtain benefits to which the patient is not entitled.

When the patient signs the insurance agreement, he gives permission for the insurance company to obtain all information relative to his illness.

LEWIS DICKINSON, M. D.

A Link in the Chain

A Heritage of Honour



Mrs. Hornaday

One often picks up a news article ranking the various states with reference to economy, per capita wealth, education, etc. Frequently, Kentucky is either at the bottom of the list or precariously close. During my travels across the United States I have come to realize that there are many intangible assets for those of us from the Blue Grass, the hill country, or the Pennyrile.

The phrase, "people are our greatest asset" is exemplified in the medical profession. The first abdominal, gynecological operative procedure was performed in Danville, Kentucky. Our medical education system in Kentucky had made provisions to develop physicians who could not afford a medical education, and at the same time provide medical care for the rural areas, through the Rural Kentucky Medical Scholarship Fund, long before the Federal Government found it expedient to use health as a means of political motivation. During the recent AMA convention, Robert Long, M.D., Louisville, was a candidate for the presidency of AMA. Now another dedicated Kentuckian, Hoyt D. Gardner, M.D., of Louisville, has been elected Chairman of the Board of AMPAC. Even though our present Medicaid system is less than ideal, it has not gained the national notoriety associated with some of the "progressive" states.

We take pride in being a part of the medical profession in this great commonwealth — a profession which still places the rights and welfare of the individual before personal or political gain.

INVITATION

Your wife is invited to attend the Spring Board Meeting of WAKMA at the Cave City Holiday Inn on April 14, 1971, at 1:30 p.m.

Our speaker will be Mrs. Linus Hewit, National Chairman of the Community Health Committee of the Woman's Auxiliary to the AMA.

Members of the Women's Auxiliary to the Warren County Medical Society will serve as hostesses for tea, immediately preceding the business session.

MRS. CHARLES E. HORNADAY, PRESIDENT
WOMAN'S AUXILIARY TO KMA

Renal Division
Department of Medicine
University of Kentucky College of Medicine

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Staff	Telephone Number
Robert G. Luke, M.D., Director (University of Glasgow, Scotland)	233-5387
Charles D. Leonard, M.D. (Washington University, St. Louis)	233-5654
Robert R. Siegel, M.D. (Columbia University, New York)	233-5170
William H. Waugh, M.D. (Tufts, Boston; holder of the Ky. Heart Association Chair of Cardiovascular Research)	233-5395

The Renal Division's main clinical interests are in the investigation and treatment of the glomerulonephritides, acute renal failure, renovascular hypertension, the management of electrolyte and acid-base disorders, and in renal transplantation.

Sixty-eight transplants have been performed in the past five years. There are currently three dialysis beds, the use of which is confined to preparation of patients for transplantation (cadaver and live donor), and for the treatment of acute renal failure.

In 1972, a 10-bed home dialysis training and transplant preparation unit is to open in the adjacent V.A. Hospital. About 100 renal biopsies are performed per year. The Renal Clinic is held on a Wednesday afternoon; appointments can be made by calling 233-5240 or by calling the individual members of the staff. The Renal Division maintains close links with the Division of Urology (Director, A. Hellebusch, M.D.), and with Nancy Holland, M.D., Nephrologist in the Department of Pediatrics.

Laboratory research interests include renal electrolyte and acid-base handling, isolated kidney perfusion, studies of urinary enzyme excretion in various disease states, and in the immunological aspects of glomerulonephritis and renal transplantation.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 6-69. This 29 year old, married, white, gravida 5, para 4 was under the care of a private physician. She had delivered previously a term stillborn.

She was seen initially on November 13, 1968, for severe lower abdominal pain with nausea, but no vomiting. This began about eight hours before admission. Her last menstrual period had been approximately three weeks prior to admission.

Physical examination revealed a well developed, well nourished adult in acute distress. Her skin was warm, blood pressure 120/60, and heart rate regular. Examination of the abdomen revealed tenderness of the entire lower abdomen with rebound. There was no localization and no CVA pain. Pelvic examination revealed the cervix clean, with minimal discharge. The uterus was described as normal in size and shape, and the adnexa revealed no masses. There was fairly severe tenderness when the uterus was manipulated.

She was treated with antibiotics, antiemetics, and sedation. Within 24 hours the pain had decreased in intensity and was fairly well localized to the right lower quadrant. She was discharged on November 15, without medication; the diagnosis being interval appendicitis. She was instructed to return should the symptoms recur and told that the appendix would then be removed.

She was apparently well until she required hospitalization again May 7, 1969, when about seven and one-half months pregnant. She complained of increased difficulty with urination for 10 to 14 days prior to hospitalization and said she had been unable to void for the last 10 to 12 hours.

Significant findings were found on vaginal examination. The fetal head was almost on the perineum and posterior to the vaginal wall and rectum. The cervix was short and palpated with difficulty posterior to the symphysis pubis. The tissue between the palpating finger and the presenting part was so thin that the suture lines were palpable. The tissue was compatible with the thickness of vaginal wall and recto-vaginal fascia. The pressure from the presenting part made voluntary urination impossible.

She was catheterized as needed and was shown how she could elevate her pregnancy to remove the pressure from the urethra. She was discharged on the ninth, and she felt confident that she could manage her urinary problem at home. She was to report to the office for her regular visits and to the hospital if necessary. The diagnosis was acute urinary retention, approximately seven and one half months, with the possibility of an extra-uterine pregnancy considered. She was readmitted to the hospital May 10, 1969, with a distended, painful bladder.

An OB/GYN consultant was called to see the patient and he examined her under light anesthesia. He felt the vertex deep in the cul de sac of the pelvis, with only a very thin layer between the vagina and the head. The diagnosis was felt to be extra-uterine pregnancy or sacculation of the posterior uterine wall, with the latter more likely. An AP of the mother's abdomen revealed a small fetus. A lateral was considered to help in the differentiation. The consultant suggested expectant treatment at present, with section at term.

She was discharged and not seen again until she was brought to the hospital dead on arrival May 15, 1969.

An autopsy was performed, revealing an advanced extra-uterine abdominal pregnancy with the placenta on the left broad ligament, ileum, and descending colon. The infant weighed 2950 grams and was without any demonstrable abnormality. The patient's death was attributed to massive hemorrhage into the peritoneal cavity as a result of a laceration of the periphery of the placenta involving the marginal sinus. No other abnormalities were demonstrated.

Comment

The Committee classified this maternal death as an obstetrical preventable one, with preventable factors on the part of physician's caring for her. It would seem that her initial episode of lower abdominal pain with nausea was a signal that some abdominal catastrophe had occurred.

Although it is difficult to assess the situation as given in the report, it would seem that perhaps laparotomy was indicated on her initial admission to establish the possibility of appendicitis or other abdominal conditions giving rise to such symptoms.

On the second hospitalization there were significant findings to indicate laparotomy, for abdominal pregnancy was suspected. This is a horrendous complication in obstetrics, and a definite diagnosis should be made when the possibility is entertained. For, as seen in this case, intro-abdominal hemorrhage can be massive, resulting in maternal death. The above is almost a textbook example of this obstetrical entity.

A report from Kentucky BLUE SHIELD® for 1970 . . .

BLUE SHIELD® Membership

a. December 31, 1969 1,043,481
b. December 31, 1970 1,089,017

Net Enrollment Gain (Members) 45,536

Percent of Net Increase Over 1969 4.36%

New Employee Groups Enrolled 1,305

BLUE SHIELD® Claims Experience

a. **Indemnity Contracts**
Number of Claims Paid 220,699
Amount Paid to Kentucky Physicians for Member Services $9,449,998

b. **Usual and Customary Contracts**
Number of Claims Paid 90,977
(154, one-tenth of 1% of claims submitted, required Peer Review)
Amount Paid to Kentucky Physicians for Member Services $4,416,433

Total Number of Claims Paid **311,676**

Amount Paid to Kentucky Physicians for Blue Shield Member Services $13,866,431

Amount Paid to Kentucky Physicians for Services Covered by Extended Benefits, Blue Cross and Blue Shield-65 and Major Medical Contracts $2,822,487

Grand Total Paid to Kentucky Physicians $16,688,918

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They all have two things in common: they have monilial vaginitis



CANDEPTIN now gives you complete therapeutic flexibility.

It is the specific high potency antimonilial agent which provides superior effectiveness. And there is at least one dosage form to meet every patient's individual needs and/or preference.

CANDEPTIN = more advantages for your patients ...

It's fast—prompt symptomatic relief of itching, burning, candidiasis discharge and malodor in 48-72 hours; usually cures completely in a single 14-day course of therapy.

It's safe—no side effects, clinical reports of irritation or sensitization have been extremely rare; exact dosage can be assured.[5,6]

It's convenient—easy to use in all forms, encourages patient acceptance and cooperation; therapy can be started in your office.

It's clinically proven—Candicidin is significantly more potent in vitro than nystatin,[1] and has a record of cure rates of 90% and more in pregnant and non-pregnant patients.[2,3,4] In two recent studies, both involving gravid and non-gravid patients, a 100% culture-confirmed cure rate was achieved with 14 days of therapy.[5,6]

CANDEPTIN (candicidin) Vaginal Tablets, Vaginal Ointment, and ... new VAGELETTES™

Now Vagelettes offer a unique new dosage form—candicidin ointment in a soft gelatin capsule – for virtually unlimited application. With Candeptin in three forms, your range of therapy has been extended to meet even those previously difficult-to-treat Candida cases.

☐ For the young patient—cut off the tip of the narrow soft end of the Candeptin Vagelette and extrude contents through the intact hymen.

☐ For the gravid patient—easy manual insertion without the need for an applicator or inserter for intravaginal use.

☐ For the multiple needs of all your patients—topical application for labial involvement, intravaginal use to treat mucosal infestation.

References: 1. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 2. Olsen, J.R.: Journal-Lancet *85*:287 (July) 1965. 3. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*:370 (Oct. 1) 1964. 4. Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966. 5. Giorlando, S.W.: to be published 1971. 6. Decker, A.: Case Reports on File, Medical Department, Julius Schmid.

hey can now be cured with **Candeptin.** Even these two.





Thanks to the new Vagelettes dosage form.

CANDEPTIN®
Candicidin Vaginal Tablets, Ointment, VAGELETTES™

Description: Candeptin (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. Candeptin Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. Candeptin Vagelettes contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.

Action: Candeptin Vaginal Ointment, Vaginal Tablets and Vagelettes possess anti-monilial activity.

Indications: Vaginitis due to *Candida albicans* and other candida species.

Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or Vagelette insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

Adverse Reaction: Clinical reports of sensitization or temporary irritation with Candeptin Vaginal Ointment, Vaginal Tablets or Vagelettes have been extremely rare.

Dosage: One vaginal applicatorful of Candeptin Ointment or one Vaginal Tablet or one Vagelette is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Available Dosage Forms: Candeptin Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). Candeptin Vaginal Tablets are packaged in boxes of 28, in foil with inserter — enough for a full course of treatment. Candeptin Vagelettes are packaged in boxes of 14. (14-day regimen requires 2 boxes).
Store under refrigeration to insure full potency.
Federal law prohibits dispensing without prescription.

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2
3
4
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6

the night shift of depression... insomnia

Depression is a 24-hour-a-day problem. And insomnia is often its nocturnal expression. In fact, insomnia may be a key symptom in establishing the diagnosis of depression.

ELAVIL HCl (Amitriptyline HCl, MSD) may prove quite helpful when you have arrived at such a diagnosis. Unlike psychic energizers or agents that merely elevate mood, ELAVIL HCl embodies a mild antianxiety action which manifests itself even before the fundamental antidepressant activity of the drug becomes evident. Daytime drowsiness occurs in some patients, usually within the first few days of therapy.

NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.

Contraindications: Known hypersensitivity. Should not be given concomitantly with or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor. Then initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.
Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with narrow-angle glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.
Precautions: When used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase, and paranoid delusions, with or without associated hostility, may be exaggerated; in any of these circumstances, it may be advisable to reduce the dose of amitriptyline HCl, or to use a major tranquilizing drug, such as perphenazine, concurrently.
When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.
Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered.
Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.
How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-cc vials containing per cc: 10 mg amitriptyline HCl, 44 mg dextrose, and 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives.
For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

when the diagnosis is depression

ELAVIL® HCl
(AMITRIPTYLINE HCl | MSD)

MSD MERCK SHARP & DOHME

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1971 Annual Meeting — Kentucky Medical Association

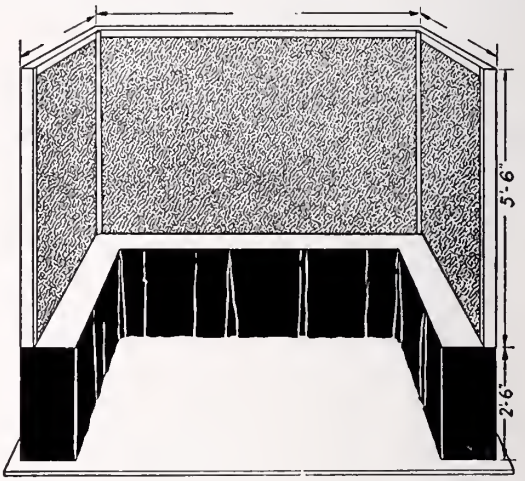
Convention Center — **Louisville, Kentucky** — **September 21, 22, 23**

Fill Out and Mail to:

BENJAMIN B. JACKSON, M.D., Chairman
Committee on Scientific Exhibits
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Applications for space should be received before July 1, 1971.

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit:
2. Name (s) of Exhibitor (s):
 Institution (if desired):
 Mailing Address:
3. Do you have a built-in exhibit?
4. Description of Exhibit: (Attach brief description not to exceed 50 words to this blank.)
5. Exhibit will consist of the following: (check which)
 Charts and Posters.... Photographs.... Drawings.... X-rays
 Specimens.... Moulages.... Other Material..... (Describe)
6. Booth Requirements:
 Amount of total wall space needed?
 Back wall?
 Shelf desired? (yes or no)
7. Indicate sources of assistance provided to you in connection with the exhibit.

8. Has this exhibit been exhibited before? If so, when & where?

Date
Signature of Applicant

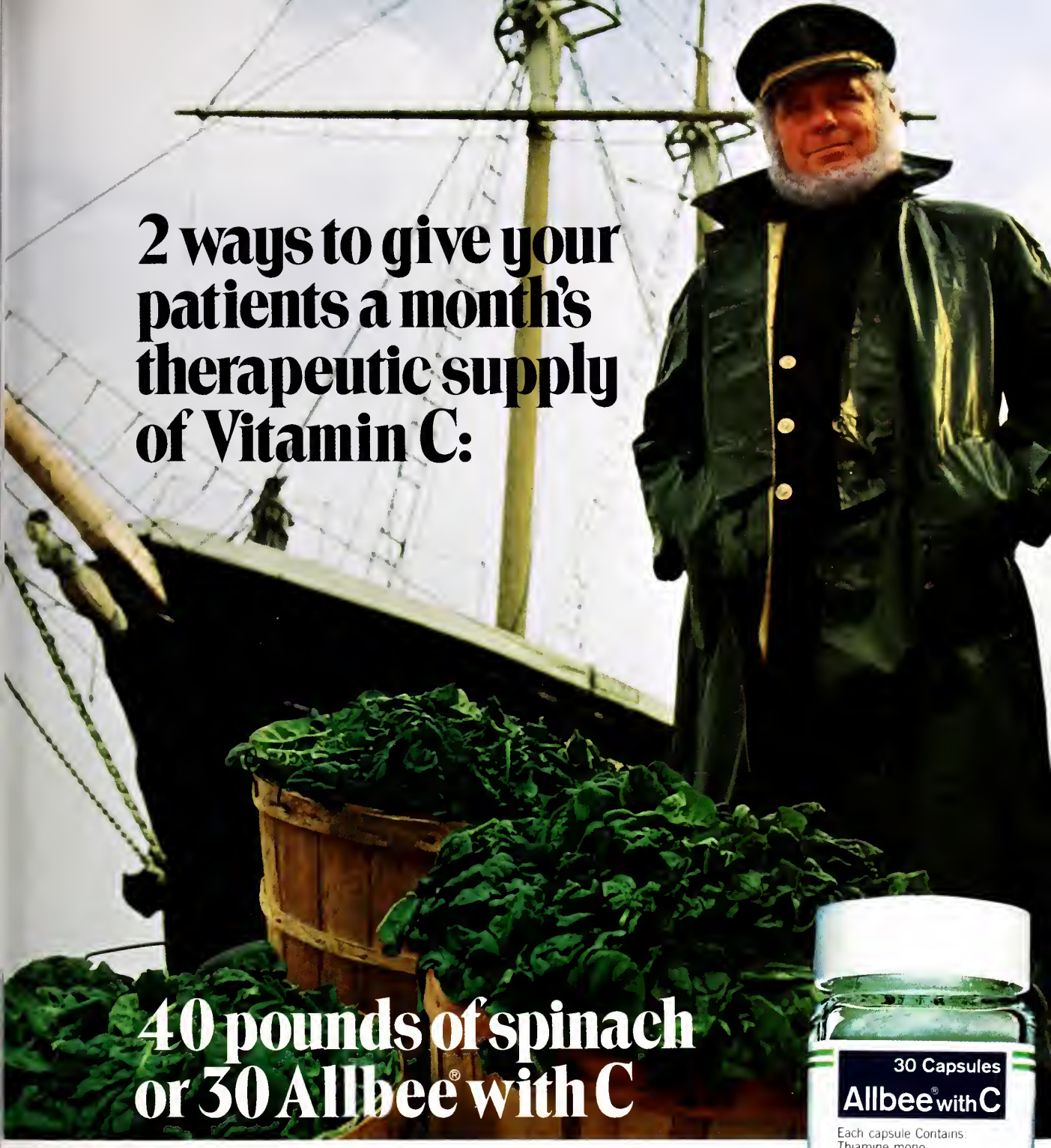
The Kentucky Medical Association will provide, without cost to the exhibitor, the following: exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the Committee on Scientific Exhibits.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor, as well as cost of cards, signs, etc. which are a part of the exhibit.

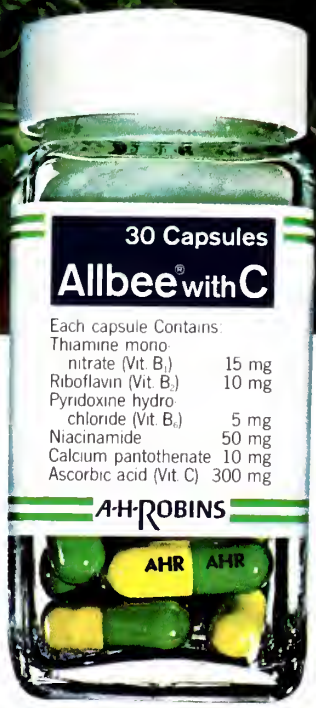
View boxes, furniture, decorations, etc. may be rented, if desired, by applying to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202, who supply equipment for the KMA Annual Meeting.

Due to the shortage of space, please have your exhibit as compact as possible.

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Although raw spinach is an excellent source of vitamin C, your patient would have to eat 40 pounds a month (about 1⅓ lbs. a day) to get as much ascorbic acid as is contained in just one bottle of 30 Allbee with C capsules (taken one capsule daily). If the spinach is cooked, a person would have to ingest more than twice as much because cooking destroys much of the vitamin C, and still more is lost when the liquid is drained off. Allbee with C also contains therapeutic amounts of B-complex vitamins. This handy bottle of 30 capsules gives your patient a month's supply at a very reasonable cost. Also the economy size of 100. Available at pharmacies on your prescription or recommendation.

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hyoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
(Warning: may be habit forming)			

Brief Summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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Fast...long-lasting relief of aches and pains of colds and flu

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Double strength Measurin timed-release aspirin offers a new kind of control for your patients with cold and flu discomforts. In each 10-grain tablet are over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means fast relief of symptoms, followed by hours of comfort. Throughout the day, Measurin gives your patients freedom from a 4-hour aspirin schedule. During the night, its 8-hour dosage schedule holds the promise of sound sleep without awakening to take extra tablets.

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Available: Bottles of 12, 36 and 60 tablets.

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Brief Summary of Prescribing Information– 9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

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Division of Bristol-Myers Company
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The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

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hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.



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Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, music therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

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Contact: (1) Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

(2) Samuel N. Workman, M.D.
Chief of Clinical Services

(3) Charles W. Neville, Jr., M.D.
Associate Professor of Psychiatry
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Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

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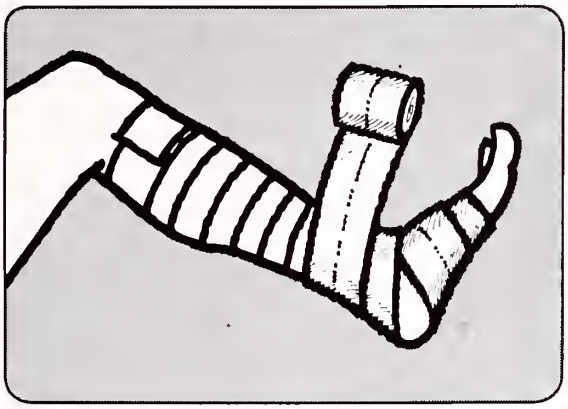
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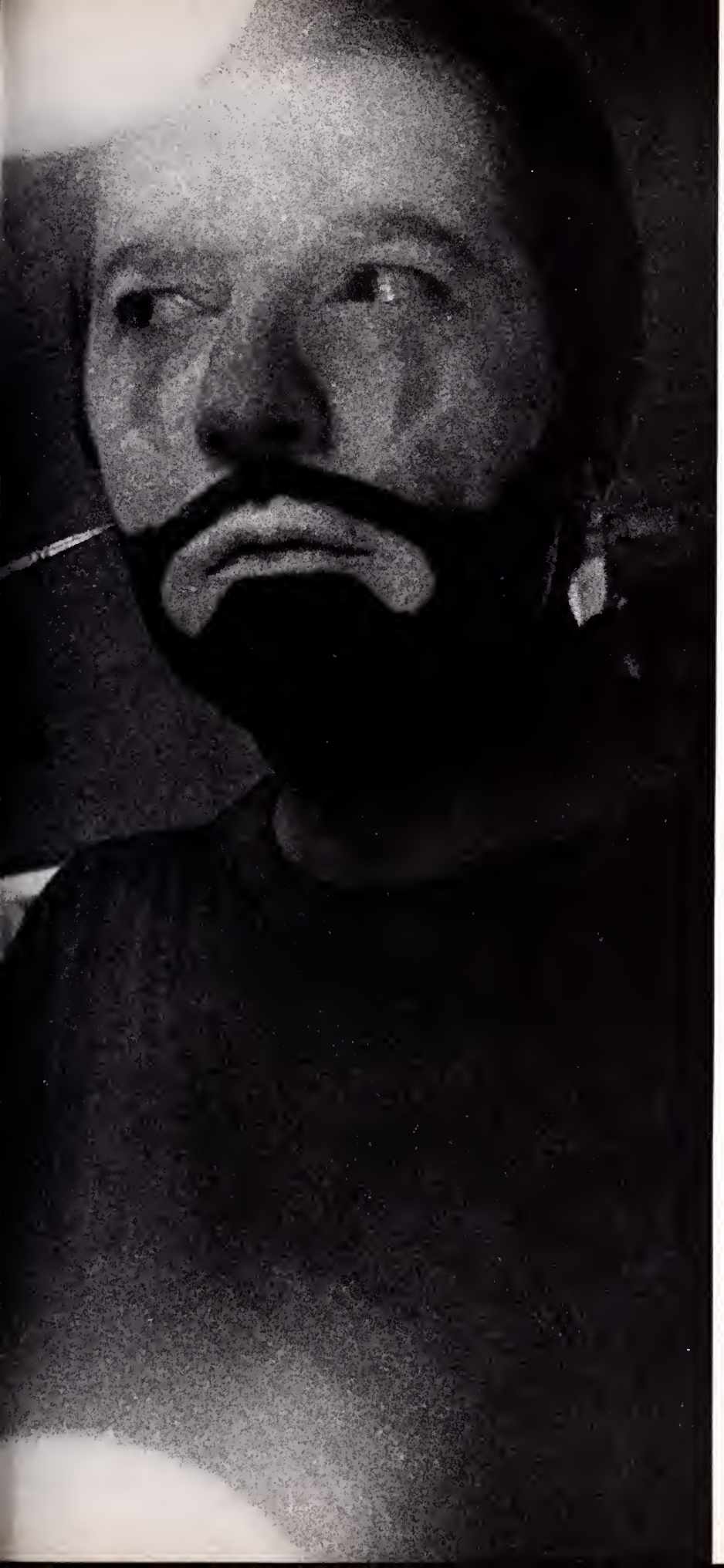
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Contraindications: Glaucoma, severe cardiac disease.

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For *Indications, Contraindications, Precautions, Side Effects* and *Dosage* see Pro-Banthine. In addition, phenobarbital should be administered with caution to patients with liver disease, mental disturbances or a significant degree of hypoxia.

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Preliminary Observations on L-Dopa in the Treatment of Parkinson's Disease†

FRANKLIN JELSMA, M. D.,* RICHARD ROTH, M. D., PAUL ROSS, M. D., and JAMES DAVIS, M. D.

Louisville, Kentucky

The authors present a preliminary report of their experience with L-Dopa in the treatment of Parkinsonism.

This preliminary report gives the pertinent findings and results of a study of 93 patients given L-Dopa for Parkinson's Disease, beginning in September, 1969. Most of the patients were hospitalized, and extensive clinical and laboratory observations were made before and during the administration of L-Dopa. Further studies are needed for long-term evaluation of the entire problem of the treatment of Parkinson's Disease with L-Dopa.

Parkinson's Disease has continued to present a problem for which the medical profession has not found a satisfactory answer. With an incidence of nearly 1:400, the challenge has been real and ever-present. Anticholinergic drugs are still used as a supplemental drug. The role of surgery is being reassessed and reevaluated.[1,2,3] L-Dopa seems to offer considerable hope, but does not solve all the problems for those afflicted.[4] It does help—some patients more than others. But it must still be used cautiously; further study is indicated. A long-term clinical and pharmacological evaluation will be valuable for future guidelines in patient management.

No attempt will be made to give a historical review of the literature, which now is in excess of 1500 papers. The literature is replete with reports on the chemistry, pharmacology, toxicology, and physiology of L-Dopa. Many clinical studies and evaluations have been made.

It has not been used clinically over a sufficient period of time to permit conclusions regarding many problems that so far await more study, more observations, and more time. What is the prolonged effect of L-Dopa? What are its limitations? What combination of drugs is best? We must wait for these and many more answers.

The purpose of this communication is to present the pertinent findings and early results of our study of 93 patients treated with L-Dopa, beginning in September 1969.

Plan and Method of Study

During the first nine months, all except three of the patients were hospitalized. Since then, there has been a tendency to try some of the patients on therapy, after having laboratory tests, as outpatients.

All those hospitalized received a complete physical examination, repeated neurological evaluations, and laboratory studies. X-rays of the head and chest, brain scan, SMA-18, ECG,

†*This study was carried out at St. Joseph Infirmary.*
**The F.D.A. gave the author a number which permitted the purchase and the use of the drug. Dopar was procured from the Eaton Laboratories.*

and, sometimes, G.I. series were made. Further laboratory and other investigations were carried out where indicated. It was thought advisable to evaluate the degree of cerebral arteriosclerosis and general arteriosclerotic changes, as well as other organic disease, and then to administer L-Dopa accordingly. In six per cent of those studied, L-Dopa was not offered to the patient.

It was possible to hospitalize two to four patients a week for study and treatment. The average stay in the hospital was ten days. During this time L-Dopa was administered in varying amounts, depending upon the patient and the reaction of the patient to the drug. Any untoward signs or symptoms were noted and kept on a worksheet. The patient was monitored two to three times a day in regard to general feeling, mental reaction, restlessness, vestibular reaction, anorexia, nausea or vomiting, blood pressure findings, the gait, change in variation of hyperkinesia, akinesia, bradykinesia, and use of muscles; they were also monitored in regard to buccolingual dyskinesia, associated with dystonia, and contracture of the neck, head, and truncal muscles.

It was planned to increase the medication, as tolerated, as rapidly as possible to a point where the patient received what was considered the optimum dosage. Most of the time it was not possible to determine this in the hospital; and often it required as much as three months or longer to arrive at this dosage.

There was no set plan for the administration of the medication, except that the patient was required to eat before each administration of L-Dopa. The schedule, in regard to the frequency and dosage, varied according to the individual patient. Other medication was utilized as necessary and indicated.[5]

Pharmacology

L-Dopa was less toxic than we had anticipated. We felt that being careful and cautious in its administration was, however, certainly worthwhile. We would certainly suggest continued caution, observation, recheck, and study of these cases while on L-Dopa.

Nausea can usually be controlled if the patient is instructed to eat something solid (not just liquids) before taking the medication. This is to be done even though they have their medication eight times a day. Vomiting did not occur at all, except in one case that had divetriculitis. In this case, the medication was discontinued. The patient had had prior episodes of diverticulitis.

Dizziness, as a result of the medication, occurred only once.

Mental changes, such as confusion and/or disorientation, occurred in two cases. These were both cerebral arteriosclerotic patients, and in one of them we had to discontinue the medication. This patient developed progressive bulbar changes and was not benefited by discontinuation of the medication slowly, or any other medication that we gave him.

Blood pressure was, as a rule, decreased. Orthostatic hypotension had to be kept in mind. It was present in 68 per cent of our cases. We did not have any cardiac or hematologic complications. One patient was found to have a carcinoma of the large bowel. This was discovered four days after the patient entered the hospital. L-Dopa was continued during the time of convalescence from surgery and afterwards to great advantage.

There were no visual changes, no tinnitus, and no disturbance of hearing.

There was only one case which had symptoms of buccolingual dyskinesia, associated with dystonia and contracture of the neck, head, and truncal muscles.

The information available, derived from preclinical investigations, indicates that L-Dopa is rapidly absorbed on per oral administration, and that it is concentrated within a short time in the adrenal glands and other organs of the body later.[6] L-Dopa readily crosses the blood-brain barrier.[5]

The principal effect of L-Dopa in animals is an excitatory action, with increased alertness and activity. Toxicity occurs from large doses, 200-500 mg. per kilo.

Metabolic effects caused increased lactic acid and decrease in glycogen in mice. Its effect on carbohydrate metabolism seems to resemble those of epinephrine.[6]

Its action appears to be related to its conversion to Dopamine, and the reconversion of Dopamine to norepinephrine and ephederine. Most of the Dopamine in the brain appears in the corpus striata and basal ganglion. Also, individuals with Parkinson's Disease have been reported to be depleted of Dopamine. This could indicate the usefulness of Dopamine in the treatment of this disease.

Hirschman and Mayer found that intravenous administration of 25 mg. of L-Dopa showed favorable response; and 50 mg. with diminution of akinesia reached its effect in about the third hour, lasting for 24 hours.

Cotzias[7] administered L-Dopa 4-8 grams daily to 16 Parkinson patients. To some, higher dosages were given. Manifestations of Parkinson did not improve completely. Nausea, faintness, and occasional vomiting occured however, especially if the dosage was increased by 0.5 grams. Usually he increased the dosage gradually by 0.2 grams from a small initial amount. In seven cases the patient received over 12 grams a day. One did not improve on 14 grams a day; another showed improvement on three grams daily; three patients developed choreiform or athetotic movements on high dosages. This would indicate an overactivity of L-Dopa.

Yahr reported increased overactivity in 28 patients. Of this group of patients, most of them showed improvement, but the degree of response was varied with the individual and the dosage given. The toxic effects included nausea, vomiting, anorexia, postural hypotension, involuntary movements, cardiac dysrhythmia, psychic manifestations, asthenia, pseudohyperthyroidism, lupus erythematosus, and leukopenia.

Granulocytopenia and related bone marrow changes have been reported; this constitutes real concern. Studies should be done frequently during the administration of L-Dopa. It should not be administered to patients who have recently been treated with MAO inhibitors. Information concerning the effects of L-Dopa on reproduction is not known, and precautions should be used in these cases.

The following conditions should be considered as possible reasons for caution or actual contraindication to the administration of L-Dopa:

1. Peptic ulcer or gastrointestinal disease
2. Borderline psychosis
3. Severe stenotic cerebral vascular disease
4. Severe occlusive cerebral vascular disease
5. Any hemotologic disorder
6. Some renal impairment
7. Severe hepatitic impairment
8. Gout
9. Patients requiring MAO inhibitors or enzyme inhibitors
10. Postural hypotension

Results

Of the number of patients studies, 49 were male and 44 female:

4% between 40 and 50 years of age
24% between 50 and 60 years of age
49.5% between 60 and 70 years of age
18.5% between 70 and 80 years of age
4% between 80 and 90 years of age

We did not find the elderly people were less able to tolerate the L-Dopa, providing, of course, their general physical condition was not impaired otherwise.

We found that the dosage varied considerably, and so the tolerance was not constant with any type of patient. Every patient seemed to have his own personal pattern of reaction. Some that we thought would not receive benefits or help seemed to do quite well. On the other hand, there were some that we expected to improve that did not receive benefit to the extent that we had anticipated. Twelve per cent of the patients received less than two grams a day and did satisfactorily on that amount. Attempts to elevate and increase the dosage produced side effects that were not in keeping with the benefits derived from the additional dosage. Thirty-one per cent did well on two to three grams a day, 39 per cent on three to four grams a day, and 18 per cent on four grams or more a day. One individual required nine grams for his optimum dosage.

It was noted that as months went by, the

dosage could be reduced from eight to four times a day by doubling up the amount given. It was necessary for the patient to eat, however, before taking his L-Dopa. In some cases the dosage could also be reduced.

All but three patients were able to tolerate L-Dopa. One of these patients had diverticulitis; two of them had cerebral vascualr sclerosis with considerable mental involvement, and L-Dopa had to be discontinued. Some extremely disabled patients were nursed along for a time and improved with L-Dopa to where they were able to get out of bed and help themselves.

About 85 per cent of the patients with hyperkinesia predominating were relieved some. Fifty per cent of these cases were relieved considerably. Some of them were able to return to work; and some patients were able to take care of themselves, whereas they had formerly been completely incapacitated and required personal care.

Ninety per cent of the patients with akinesia and bradykinesia predominating, showed improvement. A larger percentage of these showed marked improvement. Most of these patients were able to resume their former activities, and ten, who were bedfast, were able to ambulate and take care of themselves.

An effort to improve the patient's physical condition is certainly advisable. This consists of giving vitamins without pyridoxine and a careful regimen of a dietary nature. Physical therapy, exercises, and encouragement have all been useful.

Discussion

The majority of these patients fell in the age group between 60 and 70, as would be expected. We felt that the younger people, 40 to 50, or 50 to 60, could be observed further and L-Dopa not used, unless their symptomatology was severe enough to warrant it. There were more in the older age group than we had anticipated, six between 80 and 90. It was surprising how well they tolerated small dosages of L-Dopa, and how much benefit they received from it. They manifested no untoward signs or symptoms.

The hypokinetic and hyperkinetic cases were about equally divided.

Of the entire group, only five had previously had surgery. It was noted that these cases were more refractory and difficult to control with D-Lopa than were other cases who had not had surgery performed. It may be that these cases were further advanced than their clinical picture would indicate, because of surgery altering the extent of clinical manifestations presenting. All of them did show some improvement on L-Dopa, however. The time following surgery extended from one and one-half to four years before L-Dopa was given.

Dosage was planned in such a manner as to suit the individual patient's requirements. Some individuals were so weak and debilitated it was difficult to follow a particular program, and this program had to be varied with the individual.

In the debilitated patients, we started giving them 250 mg. with each meal, and increased it every third to fourth day by 250 mg. Usually we tried to space out the dosage by continuing to increase it every two to three days, and placing the additional dosage between meals and at bedtime. In these individuals, we tried to give eight doses a day. Sometimes it would require two to three months to get them up to the point of optimum dosage. On the other hand, the individuals who were physically in good condition, eating and ambulatory, we were able to start with a larger initial dosage and increase it more rapidly. In these cases, we would give 500 mg. with each meal and then every 24 hours increasing 500 mg., until they had received the maximum benefits. In the majority of cases, the patient did not require over four grams a day, while some of them required as much as eight grams a day. It was particularly pertinent to note that many of the debilitated individuals required less dosage than the stronger individuals.

We found the optimum dosage to range from two grams a day to nine grams a day. Cotzias has studied cases receiving up to 16 grams daily. We felt that the ones requiring less were the ones that were given the medication slowly and gradually.

Usually our program consisted of giving Kemadrin 5 mg. tablets, one-half tablet with each meal, and Artane Sequel 5 mg. at nine each morning.

At the Fourth International Congress of Neurological Surgery and the Ninth International Congress of Neurology in New York in

September, 1969, the following reports were made:

G. C. Cotzias and others summarized their results of the study of L-Dopa since 1966. They indicated that there was not a loss of potency of L-Dopa, but it was necessary to diminish the daily dosage in several cases. This could be well understood, because their plan was to use large doses. It was useful in muscular dystonia, hypokinesia, and rigidity. However, dysarthria was not benefited.

M. D. Yahr and associates reported on 100 patients in an 18 months study in which they thought that all symptoms of Parkinsonism were ameliorated with L-Dopa, but to a varying degree. There were some who received only minimal improvement. The use of a combination of L-Dopa and anticholinergic drugs were found to be advantageous. Postural hypotension has been a problem; cardiac arrhythmias have been a frequent problem; and involuntary movements occur in as many as three-fourths of the patients. They noted elevation of serum urea nitrogen, and SGOT values were observed in some cases.

Timerlake[5] and others reported on 40 hospitalized and ambulatory patients. One-fourth were better, a few considerably better, one-fourth were no better, but writing, walking and tracing were improved. Tremor was a little affected. Orthostatic hypotension and nausea were noted. Repetitive movements of head and limbs were noted.

McDowell[8] and associates reported on 150 patients treated: 75 for one year, others for six months or more. Two-thirds have shown 50 per cent or more improvement. Dosage ranged from 1.5—8 grams per day. They had the usual toxic reactions, but no bone narrow depression, or hepatitic or renal toxicity.

A. Barbeau[9] and others from Montreal, reported on the combination of L-Dopa and Ro 4-4602. It was thought to improve the clinical results and permit lesser dosage of L-Dopa. This was also found true by J. Siegfried and others from Zurich, Switzerland.

G. Steg[10] of Gothenburg, Sweden, reported that the common side effects are nausea, vomiting, and hyperkinesia, and he observed three cases of thrombocytopenia. All improved in two weeks. Psychic effects have been encountered, confusion and hallucinations. Some patients with seizures were reported.

The results of many more studies are available in the literature and are readily available to those who may desire further perusal of this subject.

Summary

We have studied over 90 patients with close hospital and laboratory and clinical supervision. L-Dopa was given according to the individual need of the particular patient. Effort was made to determine any untoward effects of the medication and establish an optimum dosage. This effort was extended over subsequent study and follow-ups after the patient left the hospital. The tolerance of the drug, the toxic effects, and the pharmacology have been presented.

The findings from the result of the medication in various age groups have been given.

Parkinson patients will require careful evaluation and continued study while they are on L-Dopa. The results of prolonged use of L-Dopa are not yet available, but seem so far to be favorable. There may be evidence of a tendency for general physical improvement and possibly a slowing up of the rate of progression of symptoms. Further study in regard to the role of surgery and L-Dopa, together or independent of one another, is necessary.

Acknowledgments

The author expresses his appreciation for the cooperation and help given by the management and personnel of St. Joseph Infirmary.

References

1. Wycis, Henry T., Cunningham, William, Kellett, Garry, and Spiegel, Ernest A.: L-Dopa in the treatment if post-surgical Parkinson patients. *J. Neurosurg.* Vol. 32, March, 1970.

2. Scott, R. Michael, Brody, Jacob A., and Cooper, Irving S.: The effect of thalamotomy on the progress of unilateral Parkinson's disease. *J. Neurosurg.* Vol. 32, March, 1970.

3. Schwab, R. S.: L-Dopa vs. surgery in Parkinson's disease. Trans. Am. Neurol. Ass. Meet., Washington, D. C., June, 1968.

4. Douvoisin, R., Yahr, M. D., Schear, M., Hoehn, M. M., and Barrett, R. E.: The present status of L-Dopa in the treatment of parkinsonism. Trans. Am. Neurol. Ass. Meet., Washington, D. C., June, 1968.

5. Timberlake, W. H., Zieper, I., and Schwab, R. S.: Double-blind study of L-Dopa treatment of Parkinsonism. Trans. Am. Neurol. Ass. Meet., Washington, D. C., June, 1968.

6. Hornykiewicz, O.: Metabolism of brain dopamine in human parkinsonism: neurochemical and clinical aspects. In: Biochemistry and pharmacology of the basal ganglia. Costa, E., Cote L. J., and Yahr, M.D., Eds. Hewlett, N.Y.: Raven Press, 1966.

7. Cotzias, G. C., Papavasiliou, P.S., and Gellene, R.: Modification of parkinsonism: chronic treatment with L-Dopa. *New Eng. J. Med.*, 1969.

8. McDowell, F., Lee, J. E., Sweet, R., Swift, T., Ogsbury, J., and Kessler, J.: The treatment of parkinson's disease with dihydroxyphenylalanine. Trans. Am. Neurol. Ass. Meet., Washington, D. C., June, 1968.

9. Barbeau, A., and Gillo-Joffroy, L.: Treatment of Parkinson's disease with L-Dopa and Ro 4-4602. Trans. Am. Neurol. Ass. Meet., Washington, D.C., June, 1968.

10. Steg, G.: Side-effect during treatment with L-Dopa in Parkinsonism. Trans. Am. Neurol. Ass. Meet., Washington, D. C., June, 1968.

Presumed Etiologies of Uveitis

Possible Clues to Subclinical Systemic Disease

Robert J. Kaiser, M.D.,* and William C. Edwards, M.D.*

Louisville, Kentucky

Over 400 cases of uveitis from Kentucky and Southern Indiana are analyzed regarding presumptive etiologies, and the clinical pictures described. The relative importance of various systemic disease processes in the causation of uveitis is discussed.

UVEITIS is a broad term used in ophthalmology to designate any one of several disease processes characterized by inflammations of various portions of the uveal tract. The etiology of these disorders has been obscure and the treatment correspondingly difficult. Although uveitis is relatively rare in the population as a whole, it is responsible for a significant percentage of blindness in people during their most productive years—that is, the 20 to 50 year old age group.

The uveal tract is a thin, vascular, mesodermal tissue whose anterior parts, the iris and ciliary body, form the pupil and provide the muscle of accommodation. The posterior part, the choroid, nourishes the outer layers of the retina. Because of their delicate nature, these tissues are not subject to biopsy or direct culture in the human eye. Previous research in this field has indicated that endogenous uveitis may result either from direct invasion by microorganisms or from immune or allergic factors.[1]

The present paper is a report of the diagnostic surveys of 408 patients referred to the University of Louisville Department of Ophthalmology Uveitis Service from the years 1965 to 1970. The various forms of uveitis seen in the Ohio Valley area will be discussed together with the presumptive etiologies of these diseases.

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Methods

All patients referred to the Uveitis Service received a work-up which included a detailed history, slit-lamp examination of the anterior segments of each eye, and a meticulous evaluation of the ocular fundus by direct and indirect ophthalmoscopy.

In all cases a clinical ocular diagnosis was made and the condition given a classification. This classification included localization of the inflammation (such as, anterior uveal or posterior uveal) together with grading of the severity of the disease and precise description of the appearance of all lesions. Photographic documentation was performed in almost all cases.

The routine laboratory tests performed for all patients were CBC, sed rate, VDRL, toxoplasmosis skin or blood hemagglutination test, histoplasmin, and PPD skin test. Where indicated, additional tests were performed which included total serum protein and AG ratio, serum calcium, latex fixation, LE prep, ASO titer, stool examination, urinalysis, febrile agglutinations, leptospiral agglutinations, and complement fixation for histoplasmosis. In selected cases, x-rays were obtained which included chest x-ray, skull films, sinus views, dental survey, sacroiliac joints, and long bones. In the majority of patients, skin tests were also performed for blastomycosis and coccidioidomycosis.

The following criteria were used for establishing our classification of the various clinical forms of uveitis:

1) *Presumed ocular histoplasmosis* was diagnosed according to the presently accepted criteria for this disease, which consists of clear vitreous, chorioretinitis around the optic nerve

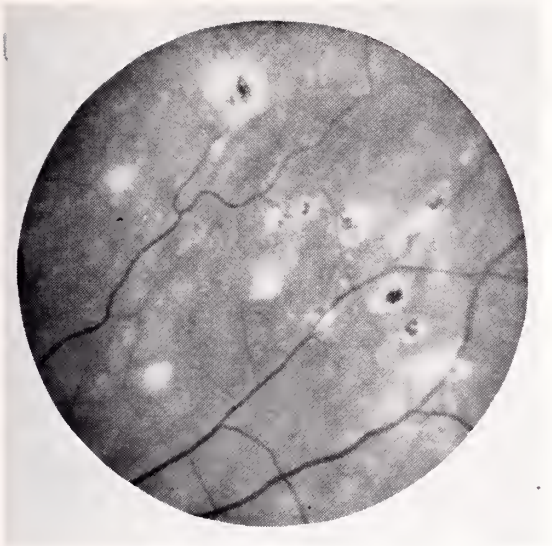


FIGURE 1 Typical peripheral punctate scars in presumed histoplasmic chorioretinitis.

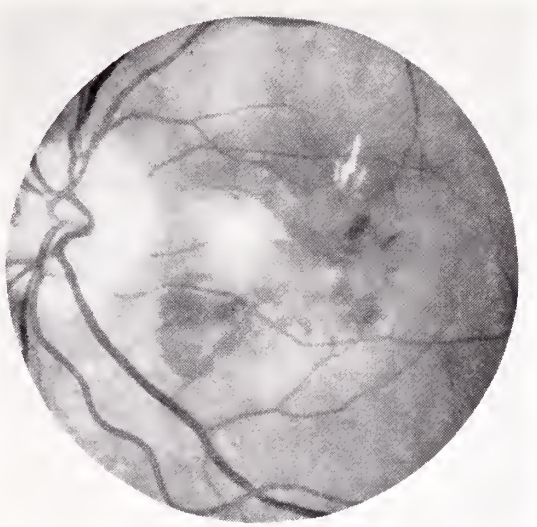


FIGURE 2 Old reaction around nerve head with active hemorrhage, exudate, and edema in macula, typical of presumed histoplasmic chorioretinitis.

head, small punctate peripheral chorioretinal areas of disease, and a choroidal nodule with retinal edema and hemorrhage in the area of the macula[2] (Figure 1, 2). A positive histoplasmin skin test or complement fixation test was necessary to support the diagnosis.

2) *Toxoplasmic uveitis* was diagnosed by the commonly accepted criteria of an active white or yellow exudative retinal lesion with cloudy vitreous and suggestive positive laboratory tests[3] (Figure 3). These laboratory tests were either a markedly reactive skin test or an elevated hemagglutination titer for toxoplasmosis.

3) *Nematode uveitis* cases were characterized by having large white or yellow fibrotic masses involving the retina and vitreous cavity of the eye. This is often accompanied in the active phase by severe intraocular inflammation, and these cases are typical of reported ocular nematode infections, most often due to Toxocara canis from infected dogs[4,5] (Figure 4). In several instances the diagnosis was confirmed by enucleation and histologic confirmation.

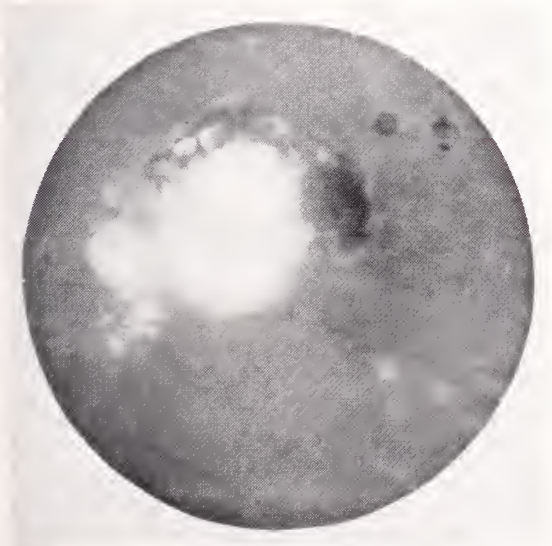


FIGURE 3 Active white fluffy lesion adjacent to previous area of inflammation (pigmented scar) with hazy vitreous, typical of toxoplasmic chorioretinitis.



FIGURE 4 Fibrotic mass with retinal tube extending to lesion in periphery, typical of nematode uveitis.

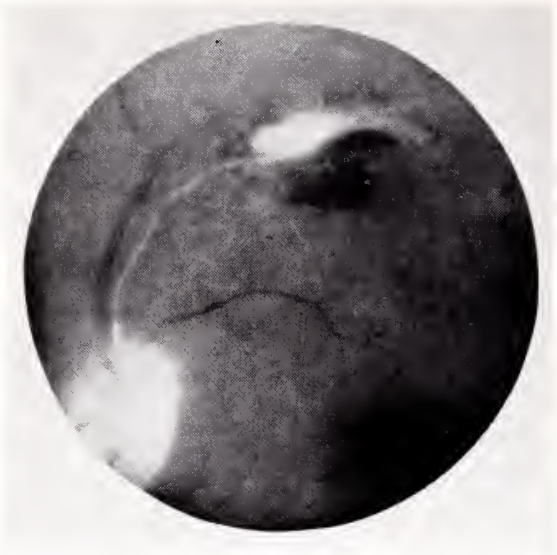


FIGURE 5 Vasculitis and pigmentary scarring adjacent to vessels typical of syphilitic uveitis.

4) *Syphilitic uveitis* cases manifested either the typical iritis, interstitial keratitis, or posterior fundus findings of vasculitis and pigmentary disturbance most marked around retinal vessels. The fundus findings were first described by Forster in 1874[6] (Figure 5). All cases were confirmed by positive VDRL or FTA-ABS serology.

5) *Anterior uveitis (iridocyclitis)* was diagnosed by commonly accepted slit-lamp methods of detecting inflammatory cells and proteinoceous material in the anterior chamber of the eye. Association with underlying systemic disease processes such as sarcoidosis, spondylitis, and others, was made by correlating the ocular findings (Figure 6) with



FIGURE 6 Large yellowish-white granulomatous nodule on iris inferiorly (pupil is dilated) and grossly visible white keratic precipitates on posterior surface of cornea, pathognomonic of sarcoid uveitis.

accepted physical, x-ray, and laboratory findings in these diseases.

6) *Mid-segment uveitis (cyclitis, peripheral uveitis)* was diagnosed by the commonly accepted criteria of finding cells and exudates in the anterior vitreous cavity, frequently located around the peripheral retinal area of the eye.[7]

7) *Pan-uveitis,* or those cases with both anterior and posterior uveal involvement, is a hybrid group which manifest involvement of both the anterior and posterior segments of the eye. Where these cases were diagnosed as either toxoplasmosis, syphilis, or sarcoid, usually accepted laboratory criteria for these diseases were employed.

8) *Tuberculous uveitis* was diagnosed by association of a markedly positive PPD skin test with a typical vasculitis of the ocular fundus. Iritis and miliary tubercles of the choroid are known to be associated with tuberculosis, but were not encountered in our series.[8]

9) *Unknown cases* were clinical forms of uveitis where neither the appearance of ocular inflammation nor the laboratory tests enabled the case to be related to one of the well established entities in the literature.

Results

Cross analysis of the 408 cases of uveitis revealed the following findings. Table I presents the major forms of disease seen in our series according to the location in the eye. The most common forms were posterior uveitis, followed by anterior uveitis, mid-segment uveitis, and pan-uveitis (inflammations involving both the anterior and posterior segments).

TABLE I
Incidence of Uveitis According to Location in Eye

	NO. CASES	PERCENT
Posterior Uveitis (Chorioretinitis)	246	60%
Anterior Uveitis (Iridocyclitis)	72	18%
Mid-Segment Uveitis (Cyclitis, Peripheral Uveitis)	50	12%
Pan-Uveitis (Anterior-Posterior Uveitis)	40	10%

Table II analyzes our cases of posterior uveitis and indicates that the typical clinical picture together with appropriate laboratory tests will indicate a presumed etiology in a large number of cases, with presumed histoplasmic chorioretinitis by far the leader, followed by the unknown category, toxoplasmosis, nematodiasis, syphilis, and tuberculosis.

TABLE II
Etiology of Posterior Uveitis (Chorioretinitis) (246 Cases)

	NO. CASES	PERCENT
Histoplasmosis	131	53%
Unknown	54	22%
Toxoplasmosis	40	16%
Nematode	9	4%
Syphilis	9	4%
Tuberculosis	2	1%
Traumatic	1	0.4%

Table III tabulates the anterior uveitis cases and indicates that the unknown category is responsible for over half the patients seen. Smaller percentages were tabulated for those in which a specific cause can be found.

TABLE III
Etiology of Anterior Uveitis (Iridocyclitis) (72 Cases)

	NO. CASES	PERCENT
Unknown	42	58%
Syphilis	6	8%
Sacroidosis	5	7%
Heterochromic	4	6%
Herpetic	3	4%
Spondylitis	2	3%
Ulcerative Colitis	2	3%
Trauma	2	3%
Post Surgical, Lupus, Lens induced, parasitic, Reiters, Rheumatoid	6	8%

Table IV lists patients with the diagnosis of mid-segment uveitis, and it is obvious that almost never can a specific etiology be found in these cases.

TABLE IV
Etiology of Mid-Segment Uveitis (50 Cases)
(Cyclitis, Peripheral Retinitis, Peripheral Uveitis)

	NO. CASES	PERCENT
Unknown	48	96%
Spondylitis, Surgical	2	4%

Table V indicates that pan-uveitis comprises the smallest number of cases according to location in the eye, but has the best chance of an individual case being ascribed a particular cause.

TABLE V
Etiology of Pan-Uveitis (40 Cases)

	NO. CASES	PERCENT
Toxoplasmosis	23	58%
Unknown	10	25%
Syphilis	4	10%
Sympathetic	2	5%
Sarcoid	1	2%

Table VI presents another analysis of our cases in regard to the basic disease process or etiology of inflammation, without regard to its location in the eye. Here one can see that this category in all cases seen was unknown, followed closely by presumed histoplasmosis, then by toxoplasmosis, syphilis, nematodiasis, sarcoidosis, and other less common causes.

TABLE VI
Etiology of All Cases of Uveitis

	NO. CASES	PERCENT
Unknown	154	37%
Histoplasmosis	131	32%
Toxoplasmosis	63	15%
Syphilis	19	5%
Nematode	9	2%
Sarcoid	6	2%
Heterochromic	4	1%
Herpetic	3	1%
Spondylitis	3	1%
Trauma	3	1%
Tuberculosis	2	0.5%
Sympathetic	2	0.5%
Ulcerative Colitis	2	0.5%
Post Surgical	2	0.5%
Other	3	1%
TOTAL	408	

Discussion

Although, in our series, the greatest number of cases referred were posterior uveitis (Table I), this does not necessarily reflect the true incidence in the general population. The posterior cases are generally more threatening to vision and are more likely to be referred. In fact, anterior uveitis is far more common than posterior uveitis,[9] but many cases are mild and easily controlled with topical steroid and cycloplegic eye drops.

In our endemic area, presumed histoplasmic chorioretinitis is the most common cause of posterior uveitis, but over the country as a whole, toxoplasmosis is probably the most common known cause.[10,11] It must also be remembered that the entity of ocular histoplasmosis is far from being proven, as the organism has never been recovered from the human eye, whereas there is definite proof that toxoplasmosis nematodiasis, syphilis, and sarcoidosis can cause certain forms of uveitis.[3,4,5,12]

It is interesting to note that in patients with

uveitis conforming to the histoplasmosis, toxoplasmosis, and nematodiasis categories, there is almost never a history of systemic illness which can be attributed to these diseases, indicating that the uvea probably acts as a delicate shock organ which brings to the surface where it can actually be seen by both patient and doctor what is otherwise a subclinical disease process. One might also speculate that symptoms commonly attributed to other causes such as influenza and upper respiratory infections may occasionally be due to the aforementioned causes of uveitis. It should also be noted that we were able to uncover several cases of undiagnosed or inadequately treated syphilis in a patient with only a typical uveitis.

The large number of unknowns in the anterior and mid-segment uveitis categories may include forms of auto-immune disease or viral inflammation, but until there is more direct proof of this, they must continue to be classified as unknown.

Conclusion

An attempt has been made to correlate the different clinical forms of uveitis with laboratory evidence of underlying systemic disease processes. The most common presumptive etiologies of uveitis found in the present study are: unknown, histoplasmosis, toxoplasmosis, syphilis, nematodiasis, and sarcoidosis. The preponderance of cases labeled as unknown and the fact that almost all etiologies are presumptive, at best, indicate the need for continued research in the field of uveitis. The systemic diseases thought to be causally related to uveitis also require further investigation, as well as a higher level of awareness on the part of the general medical practitioner.

Acknowledgments

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References

1. Woods, A. C.: *Endogenous Uveitis.* Baltimore, Williams, and Wilkins, 1956, pp. 1-38.

2. Schlaegel, T. F., Weber, J. C., Helveston, E., and Kenney, D.: Presumed Histoplasmic Choroiditis. *Amer. J. Ophth.* 63:919, 1967.

3. Hogan, M. J., Kimura, S. J., and O'Connor, G. R.: Ocular Toxoplasmosis. *Arch. Ophth.* 72:592, 1964.

4. Hogan, M. J., Kimura, S. J., and Spencer, W. H.: Visceral larva migrans and peripheral retinitis. *JAMA.* 194:1345, 1965.

5. Editorial: Worms and Eyes. *JAMA.* 194:1382, 1965.

6. Forster, R.: Zur klinischen kenntriss der choroiditis syphilitic. von Graefes. *Arch. Ophth.* 20:33, 1874.

7. Brockhurst, R. J., Schepens, C. R., and Okamura, I.: Uveitis: II. Peripheral Uveitis: Clinical description, complications, and differential diagnosis. *Amer. J. Ophth.* 49:1257, 1960.

8. Coles, R. S.: Uveitis associated with systemic diseases. *Survey Ophthal.* 8:377, 1963.

9. Darrell, R. W., Kurland, L., and Wagener, H. P.: Epidemiology of Uveitis: Incidence and prevalence in a small urban community. *Arch. Ophth.* (Chicago) 68:4, 1962.

10. Cassady, J. V.: Toxoplasmic retinochoroiditis. *Trans. Amer. Ophthal. Soc.* 58:392, 1960.

11. O'Connor, G. R., and Hogan, M. J.: Recent Developments in Infectious Diseases o fthe Retina and Choroid. In A. Sorsby (Ed.), *Modern Trends in Ophthalmology.* London: Butterworth, 1967, pp. 75-90.

12. G. O'Connor (Eds.): *Clinical Methods in Uveitis.* St. Louis: Mosby, 1968, p. 159.

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Grenz Ray Treatment of Basal Cell Carcinoma

Robert McCabe, M.D.

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Grenz ray therapy provides many advantages in cutaneous radiation therapy. Among these are the infrequency of serious radiation sequelae and the fact that underlying tissues as bone and cartilage are not affected by Grenz ray therapy.

As recently as 1961, Victor Witten, M.D., stated in the *Yearbook of Dermatology* that the "treatment of the skin by Grenz ray therapy is still in its infancy." Historically, Grenz rays were introduced by Schultz and Stern in 1910, about 15 years after the discovery of x-rays. When the Lindemann window of Lithium and Cobalt was discovered in 1925, Bucky soon reported the practical applications of Grenz rays.[2]

Around 1950, Dan Kindel, M.D., began his critical evaluation of Grenz rays.[3] He stressed the necessity of proper instruments for calibration of Grenz ray equipment, indications for its use, and dosage schedules. Prior to this work, it was difficult to evaluate scientificially studies with Grenz ray therapy, because, up until then, there were no chambers available to measure accurately such things as output and half value layers.

It was not until 1954 that Doctors Pillsbury, Blank, and Madden concluded that calibrations of Grenz ray therapy could be accepted.[4] At this time these three reported on 24 patients who had received 4000 to 16000r units of Grenz ray with no harmful sequelae noted after nine to 56 months. Again, it was not until 1954 that the United States Bureau of Standards perfected its low kilovoltage, contact potential, open air chamber which made calibration uniformly possible.

The advantages of Grenz ray therapy have been well documented by Doctor Kindel. Grenz ray has been used effectively in the treatment of a variety of early and superficial cutaneous malignancies. It is our opinion that cosmetically and therapeutically, Grenz treatment is probably the treatment of choice for intraepidermal basal cell carcinoma, for intraepidermal squamous cell carcinoma, and for senile keratoses with early squamous cell carcinoma. Its use is particularly gratifying when these lesions are present on the dorsum of the hand, the rim of the ear, or in a location where sequelae incurred with the use of conventional irradiation can be a formidable objection.

We have treated a large series of the aforementioned malignancies and have followed these cases diligently for as long as 14 years. We are impressed by 1) the complete absence of such undesirable late effects as ulceration and sclerosis, 2) a recurrence rate as low as any other method employed, and 3) the definitely superior cosmetic result as compared to other methods of treatment.

We have also been impressed by the wide margin of safety in administered doses. We have purposely treated large lesions with total dosages in the range of 25,000 to 40,000r units with surprisingly little objectionable sequelae. Eight years ago we presented this case to the Central States Dermatological Society. These treatments involved both check areas; to this date the only sequelae has been a mild ectasia.

It has repeatedly been surprising to us how effective Grenz radiation can be, even in the treatment of relatively "thick" lesions. Theoretically, one would not expect such therapy to be effective in lesions thicker than 3 mm. in depth. However, we have observed, as others have, the adequate response of thick nodular and infiltrative plaques of mycosis fungoides and leukemia cutis to this modality.

Acting on these previous observations, it was considered both important and interesting to investigate the effect of Grenz irradiation

on relatively thick lesions. We then decided to treat not only superficial basal cell carcinoma, but also the nodular, cystic, and infiltrative types which one would ordinarily treat with conventional radiation.

Our previous routine had been that which is generally accepted. This consisted of biopsy of the lesion, followed by a trimming of the lesion to the level of the skin. The area was then irradiated with a total fractionated dosage of from 3000 to 4000r, using the factors HVL - 1 mm. Al, PKV - 90, MA - 5, and a skin target distance of 10 cm. In this series, however, the same procedure was followed, differing only in the fact that the radiation given was Grenz radiation with factors of HVL 12 microns of Al, 10 PKV, 10 MA, STD of 9 or 12.5 cm., and using a total fractional dose of 15 to 25,000r units. An important facet of the procedure is the necessity of judicially removing the crust before treatment with Grenz ray.

We are reporting on 34 such cases at this time (see Table I) and have followed these patients from six to 14 years. We have actually treated more than 100 patients by this method.

In reporting these results, we realize that this is a preliminary report. However, we have followed these cases approximately eight to 14 years. As Doctor Kindel has stated "there is a much longer lapse in time for evaluation than in most forms of therapy." However, as of this date, there has been no evidence of relapse of any of these cases treated by this method; and certainly cosmetically, there have been distinct advantages for the patients.

TABLE I

CASE	AGE	SEX	YEAR	LOCATION	CLINICAL DIAGNOSIS	TOTAL DOSE
1	70	M	1956	Lip	Nodulo-ulcerative	34,000r
2	69	M	1956	Ear	Nodulo-ulcerative	25,500r
3	60	M	1957	Cheek	Nodulo-ulcerative	35,160r
4	70	M	1957	Nasal	Nodulo-ulcerative	34,000r
5	35	F	1958	Forehead	Nodulo-ulcerative	21,210r
6	79	M	1958	Ear	Nodulo-ulcerative	15,000r
7	58	M	1958	Back	Nodulo-ulcerative	18,000r
8	58	M	1958	Hand	Nodulo-ulcerative	24,480r
9	51	F	1960	Nose	Nodulo-ulcerative	14,970r
10	71	F	1960	Neck	Nodulo-ulcerative	21,840r
11	69	F	1960	Nose	Adenoid	16,570r
12	55	M	1960	Arm	Nodulo-ulcerative	17,500r
13	45	M	1960	Ear	Nodulo-ulcerative	28,800r
14	72	M	1960	Scalp	Nodulo-ulcerative	21,000r
15	70	F	1961	Cheek	Adenoid	23,000r
16	53	F	1961	Forehead	Infiltrative	28,240r
17	70	M	1961	Cheek	Pigmented	15,000r
18	50	M	1961	Neck	Infiltrative	22,000r
19	65	M	1961	Neck	Nodulo-ulcerative	15,000r
20	65	M	1961	Chest	Nodulo-ulcerative	15,000r
21	65	M	1961	Ear	Infiltrative	15,000r
22	81	F	1961	Neck	Nodulo-ulcerative	15,000r
23	58	M	1961	Neck	Pigmented	21,180r
24	70	F	1961	Forehead	Nodulo-ulcerative	14,970r
25	58	M	1961	Neck	Nodulo-ulcerative	15,000r
26	70	M	1961	Ear	Infiltrative	24,000r
27	74	F	1961	Scalp	Infiltrative	28,000r
28	57	M	1962	Neck	Infiltrative	24,000r
29	70	M	1962	Hand	Infiltrative	22,200r
30	81	F	1962	Ear	Nodulo-ulcerative	17,475r
31	62	M	1962	Ear	Infiltrative	15,000r
32	75	F	1962	Nose	Nodulo-ulcerative	22,500r
33	42	M	1962	Nose	Nodulo-ulcerative	24,000r
34	72	F	1960	Forehead	Infiltrative	22,000r

References

1. *Year Book of Dermatology, 1961,* Year Book Medical Publishers, Chicago, Ill.

2. Bucky, Gustau, and Combes, Frank C.: *Grenz Ray Therapy Principles and Clinical Applications,* Springer Publishing Co., Inc., New York, New York.

3. Kindel Dan J.: The Clinical and Experimental use of Different Types of X-rays, Applying them to Various Levels of the Skin; *ACTA Dermat-Venereol: Proc. 11th International Cong. Dermat.* 1457, p. 392-403.

4. *Year Book of Dermatology,* 1954, Year Book Medical Publishers, Chicago, Ill.

Medical Progress

Jaundice in the Newborn

Billy F. Andrews, M.D.*

Presented here are my own opinions and experience regarding the jaundiced newborn, in light of recent advances.

Hopefully, with the diagnostic and therapeutic techniques available today, many physicians will never see a kernicteric infant; but those who would care for infants must be aware of the signs and symptoms.

In the jaundiced infant the appearance of tremors, ataxia (boxing), eye rolling, and other motor disturbances, and lethargy are usually seen before coma, seizures, or opisthotonus. With or without all of these signs, death may ensue shortly; or after many months, choreoathetosis, hearing deficiency, or learning or behavior disorders may be recognized as a result of bilirubin encephalopathy.

Many standard texts define hyperbilirubinemia as 10 to 15 mg per cent bilirubin; however, kernicterus has been reported with bilirubin less than 10 mg per cent in immature infants and absent with levels of 40 mg or more in term infants.[1,2,3]

Numerous reports indicate clinical icterus is recognized by competent observers at 4 to 8 mg per cent bilirubin levels (in phototherapy this may be raised to 10-12 mg per cent) in up to 70 per cent of all newborns during the first week of life. Pre- or postnatal breakdown of red blood cells is the major source of bilirubin. Glucuronyl transferase, which is largely responsible for conjugation of indirect bilirubin, may be deficient or interfered with and not be able to handle the load of bilirubin. Investigators have recently demonstrated the enterohepatic shunt for unconjugated bilirubin also is operating in the fetus, for a considerable amount of bilirubin is found in meconium.[4] Other excretion mechanisms before and after birth are under investigation and may shed new light on current and future methods of therapy.

The major clinical concern is for unconjugated or indirect bilirubin which is responsible for encephalopathy and kernicterus, the staining of the basal ganglia and nuclear areas surrounding the fourth ventricle.[3] Indirect bilirubin is a highly lipid soluble molecule which crosses biologic membranes, and its powerful effect of uncoupling oxidative phosphorylation may explain some poisonous effects upon vital cellular function. The nature of pigment neurotoxicity in vivo is not understood. The predilection to develop kernicterus of premature and other infants with anoxia, acidosis, hypoproteinemia, hypoglycemia, hyperosmolality, elevated free fatty acids, and the competition of drugs with bilirubin for binding sites on albumin, and their inhibitory effect upon conjugation and/or excretion is well known.

The discovery of bilirubin transport by albumin and that the binding capacity was two moles per mole of albumin was of signal importance diagnostically and therapeutically. The association of kernicterus in a group of prematures on sulfisoxazole soon led to a list of other substances which may displace bilirubin from albumin, e.g. Thyroxine, triidothyronine, salicylates, heparin, fatty acids, etc. The unbound, lipid soluble bilirubin is free to cross membranes and enter cells (blood-brain barrier), possibly in either direction.

Synthetic vitamin K in large dosage, and also absence of specific enzymes in red cells, such as glucose 6 phosphate dehydrogenase

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and pyruvate kinase, were associated with kernicterus. The influence of lowering pH (tissue and circulatory), especially in asphyxiated subjects, also increases unbound bilirubin.[5] It appears that damaged brain tissue has a greater affinity for the pigment too. Experimental studies indicate that albumin and correction of pH increase bilirubin removal from tissues.

The application of amiocentesis studies of O.D. at 450 mμ allows almost a 95 per cent confidence limit for predicting the outcome of Rh sensitized pregnancies, which provides the clinician the options of intrauterine transfusion, time of termination of pregnancy, and immediate or delayed exchange transfusion after delivery.[6,7] The efficiency of exchange transfusion as a method for removal of bilirubin, antibodies, and correction of anemia remains unchallenged and it is the procedure of choice; although in the hands of the inexperienced it still remains dangerous.[8,9] Therefore, the risk of exchange should always be weighed against the risk of kernicterus or other complications.

Under circumstances when amniocentesis studies are not available, a bilirubin of 5 mg per cent, and or hemoglobin under 10 Gm per cent at birth, or severe clinical evidence of erythroblastosis, hydrops, hepatosplenomegaly, anemia, etc. are used as indications for exchange transfusion. During the first 24 hours of life, should the bilirubin rise to 12 mg per cent or more, we usually perform exchange transfusion on the basis of predicted rise or clinical signs. We try to prevent elevations of above 15 mg per cent in prematures and 20 to 25 mg in term infants, irrespective of etiology, unless protein or albumin studies indicate otherwise.[1,2,10] Prolonged periods at high bilirubin levels are felt to be deleterious. Bilirubin determinations every 4 to 6 hours, or more often, are performed as indicated.

With the complete cooperation of obstetricians and pediatricians in large medical centers, even the expected mortality for hydrops fetalis has been markedly reduced from 95 to 35 per cent.[11] *To be forewarned is to be forearmed.*

When one is not forewarned and sees a jaundiced infant, hemolytic versus nonhemolytic and physiological causes must be entertained; and a family history and appropriate laboratory studies obtained, e.g. bilirubins, protein, Hgb., blood smears, blood group, type, and Coombs tests, albumin binding studies, specific cultures, enzymes and serological tests, etc.

Babies are rarely born jaundiced; however, when this finding is observed, erythroblastosis fetalis due to Rh sensitization or, less commonly, intrauterine infection should be suspected. Jaundice in the first 24 hours of life should be considered pathological and is most frequently due to Rh sensitization. Although more common than Rh, ABO incompatibility is usually less severe, and jaundice progressively increases from one to three or four days.

Occasionally infants with cytomegalic inclusion disease, congenital toxoplasmosis, rubella, or syphilis may develop icterus on day one. On the second day ABO and physiological jaundice are considered first, and then other causes. Physiological jaundice is characteristically recognized by the third day and may be exaggerated by other causes, such as hemorrhage.

Jaundice of sudden onset after three days should cause one to think of infection, as well as other causes. Delayed onset at a week or later should encourage one to think of sepsis, hepatitis, congenital defects of the biliary tract and liver, inborn errors of metabolism such as Crigler-Najjar and galactosemia, or defects in red blood cells and liver enzymes, and even such causes as breast milk or toxins.

Over the past decade several methods other than exchange transfusion for preventing or alleviating the amounts of bilirubin have become available and are currently under evaluation, as are the methods of routine care and feeding. The importance of early feeding or fluids by oral or intravenous routes should not be underestimated for their influence on bilirubin levels; also the effect of early feeding on hydration *and* passage of meconium may serve to lessen potential for bilirubin reabsorption.

Maybe the once proposed charcoal feeds stimulated stooling, too.

Our own and other clinical studies show lower bilirubin values in early fed infants.[12] The use of salt free albumin as a single form of therapy has not been recommended. Although we know it makes available sites for bilirubin binding, blood bilirubin values are increased, and this may influence decisions regarding exchange transfusions.[3] It is used by many at 1 Gm/Kg/body weight while waiting for blood for an exchange transfusion, or when added to the exchange blood, it may increase the amount of bilirubin removed from 10 to 40 per cent.

The observation that phenobarbital and other drugs induce or enhance glucuronyl transferase activity has been applied with apparent success *in utero* and after birth.[13] Investigators recommend 5 mg of phenobarbital/Kg/day. Large numbers of infants to date have not been studied, and long term effects have not been evaluated.

Another fairly recent therapy which appears to be on a sound physiological and pharmacological basis is the administration of Agar (U.S.P.), 250 mg every four hours with feeds.[4] Simultaneous excretion of bilirubin in meconium and elimination of further hyperbilirubinemia suggest that the Agar feeding was responsible by blocking the enterohepatic circulation of bilirubin. The most currently used therapy for prevention and treatment, phototherapy, deserves further comment.

Although phototherapy was first reported by Cremer fifteen years ago, few controlled studies of magnitude with follow-up have been reported.[14,15] It has not received general acceptance in the United States because of the concern about possible toxicity of the photodecompensation products, potential damage to the retina, severity of jaundice or occurrence of jaundice would not be appreciated, and cyanosis and anemia, rashes, etc.[16] could not be evaluated.

The discovery that decomposition products were water soluble and did not cross the blood-brain barrier was soothing information, but a few infants have been reported with rashes, retarded growth, brown color, and dark blood.[3,16] Experimental animals under light without protective patches have developed retinal damage, sterility, and retarded growth.[16,17] Increased red blood cell hemolysis, decrease in albumin binding, increased destruction of imidiazole and pyrole derivatives, and destruction of histidine, among other things, are stated to result from photosensitization or light.[16]

The fact that so few "brown" infants or observations of unusual plasma have been observed under light, may point to other contributing or associated diseases such as undiscovered inborn errors of metabolism or infectious causes. Thousands of infants have undergone light therapy since 1957 and untold millions have been exposed to natural light which would be around 10,000 foot-candles in contrast to the 300-600 foot-candles used in most nursery phototherapy units. The bulbs must be checked frequently or changed to insure activity in the photo-oxidation range. Much work remains to be done, and infants responding in an unusual fashion should be studied at the larger clinical research centers.

We have been using phototherapy with Dura Test Vita Lite 40 watt fluorescent bulbs at 400-800 foot-candles for treatment of high risk infants since a visit to our center by Jerold Lucey, M.D., in 1968.[18] Precautions taken during phototherapy are: 1) an extensive physical examination and laboratory investigation for jaundice is performed prior to institution of therapy;)2 bilirubin, hemoglobin, and other studies are performed as often as they were clinically indicated prior to phototherapy, but never less than once in 24 hours; 3) such infants are placed in incubators, preferably with temperature under servo-control; 4) the eyes must be adequately shielded; 5) rotation of the infant, who wears as little clothing as possible, is performed on a scheduled basis; 6) all incidences or change in the baby's condition, in excreta or color of blood are reported; and 7) a bilirubin and hemoglobin are determined at least 24 hours

after therapy is discontinued to see if rebound or anemia has occurred.

We have found this therapy may handle a predicted rise of bilirubin of 0.2 to 0.3 mg per hours; the number of first and second exchange transfusions have decreased, and our only observed complications have been a few babies with rashes, intermittent priapism, and loose stools. We have seen no cases of the brown serum, brown baby syndrome at the Louisville General Hospital over the past three years.

On post mortem examinations kernicterus has not been observed, nor athetosis seen in the living infants. A period of 15 to 20 years will be necessary to determine whether sterility occurs in humans. However, European and South American studies should be available soon. In cases where the bilirubin rises in excess of the capacity of light, we perform exchange transfusions as indicated by the usual bilirubin curves of Allen and Diamond,[10] or as indicated by total protein, albumin binding studies, or clinical status of the patient.

Behrman and Hsia[16] state in their summary of a symposium on phototherapy for hyperbilirubinemia, "For each patient the clinician must balance the advantages and risks of phototherapy against the likelihood of injury from hyperbilirubinemia and the risks of alternative modes of treatment. The risks will vary depending upon the cause of jaundice, whether or not the infant is premature or term, and the various clinical complications that beset a particular patient."

For hyperbilirubinemia resulting from severe hemolytic anemia, exchange transfusion is almost always performed. Possibly in the future, due to full scale use of anti-Rh hyperimmune globulin, exchanges will become less frequent. Hopefully newer methods such as Agar feeds, enzyme induction, and light therapy will reduce the need for exchanges, and we can be relieved of the "push and pull exercise" necessary to prevent kernicterus, usually in the middle of the night. Much study, laboratory research, and clinical follow-up of patients is necessary, especially in cases who behave differently from the usual clinical experience. We must always concern ourselves that no therapy is without potential danger, however innocuous it may appear.

REFERENCES

1. Barnett, H. L.: 14th Ed. *Pediatrics.* Appleton-Century-Croft, New York, 1968.

2. Nelson, W. E.: Ninth Ed. *Textbook of Pediatrics.* W. B. Saunders Company, Philadelphia, 1969.

3. Diamond, I.: Bilirubin binding and kernicterus in *Advances in Pediatrics*, edited by Irving Schulman, Vol. 16, pp. 99-119, Year Book Medical Publishers, Chicago, 1969.

4. Poland, R. L., and Odell, G. B.: Physiologic jaundice: The enteroheptic Circulation of Bilirubin. *New Eng. J. Med.* 284:1, 1971.

5. Silberberg, D. H., Johnson, L., and Ritter, L.: Factors influencing toxicity of bilirubin in cerebellum tissue culture. *J. Ped.* 77:386, 1970.

6. Andrews, B. F., Wolfe, W. M., Jr., Hoffman, J. H., and Thomas P. P.: Significance of protein and bilirubin-protein ratio in amniotic fluid from Rh-isoimmunized mothers. *J. Kentucky Med. Assoc.* 66:363, 1968.

7. Andrews, B. F.: Amniotic fluid studies to determine maturity. *Ped. Clin. N. America* 17:49, 1970.

8. Andrews, B. F., and Feinbloom, R. I.: Efficiency of exchange transfusion determined by pre- and postexchange fetal hemoglobin concentration. *Am. J. Obst. and Gynec.* 90:783, 1964.

9. Muthana, F., and Andrews, B. F.: To shake or not to shake. *Clin. Ped.* 8:240, 1969.

10. Allen, F. H., Jr., and Diamond, L. K.: *Erythroblastosis Fetalis.* Little, Brown, and Company, Boston, 1958.

11. Andrews, B. F., Collier, R. N., and Hall, B. D.: Increased survival in hydrops fetalis. *South. Med. J.* 61:1343, 1968.

12. Andrews, B. F., Cook, L. N., and Falkner, F. T.: Biologic influence of early high caloric feeding of low weight infants. 36th Annual Meeting Society for Pediatric Research, Atlantic City, p. 69, 1966.

13. Yaffe, S. J., Levy, G., Matsuzawa, T., and Biliah, T.: Enhancement of glucuronide conjugating capacity in a hyperbilirubinemic infant due to apparent enzyme induction by phenobarbital. *New Eng. J. Med.* 275:1461, 1966.

14. Cremer, R. J., Perryman, P. W., and Richards, D. H.: Influence of light on hyperbilirubinema of infants. *Lancet.* 1:1094, 1958.

15. Lucey, J. F., Ferreiro, M., and Hewitt, J.: Prevention of hyperbilirubinemia of prematurity by phototherapy. *Pediatrics* 41:1047, 1968.

16. Behrman, R. E., and Hsia, D. Y. Y.: Summary of a symposium on phototherapy for hyperbilirubinemia. *J. Ped.* 75:718, 1969.

17. Sisson, T. R. C., Glauser, S. C., Glauser, E. M., Tasman, W., and Kuwabara, T.: Retinal changes produced by phototherapy. *J. Ped.* 77:221, 1970.

18. Seligman, J. W., Andrews, B. F., and Elias, S.: Phototherapy in management of hyperbilirubinema of the high risk infant. *South. Med. J.* 62:1550, 1969.



Health Care Insurance Assistance Act Of 1971

(Medicredit)

A Proposal for Federal Financing of Health Insurance

Medicredit would: 1) pay the full cost of health insurance for those *too poor* to buy their own, 2) help those who can afford to *pay a part*—if not all—of their health insurance premium. The less they can afford to pay, the more the government would help out, 3) see to it that no American would have to bankrupt himself because of a long-lasting, catastrophic illness.

(This bill addresses itself only to *financing* health care; other legislation and programs involve medical manpower supply and distribution, the method of delivering care, and other problems such as environment, health education, and peer review.)

Analysis

Federal Contribution

The Government would pay 100 per cent of the premium for low-income beneficiaries (an individual and his dependents whose combined income for a taxable year would not give rise to any income tax liability). For others, the Government would provide scaled participation ranging between 97.5 per cent and 10 per cent, favoring lower-income persons, in the payment of premiums for basic coverage, and would pay in full the premium for catastrophic expense coverage. A table of allowable percentages for related income tax liabilities is included in the bill.

The extent of participation would be determined with reference to federal income tax liability of an individual in a particular year (base year). A health care insurance policy, qualified under this program, would run for a 12-month period beginning in the year following (benefit year).

Health Insurance Certificates; Income Tax Credits

A beneficiary eligible for full payment of premium by the Federal Government would be entitled to a certificate acceptable by carriers for health care insurance for himself and his dependents. Eligible beneficiaries with whom the Government would be sharing the cost of premium could elect between a credit against income tax or a certificate. The carrier, as defined in the bill, would present certificates received in payment of premium to the Federal Government for redemption.

Qualification of Participating Carriers

To participate in the plan, a carrier would have to qualify under state law, provide certain basic coverage, make coverage available without pre-existing health conditions, and guarantee annual renewal. An assigned risk insurance pool among carriers would be utilized as appropriate.

Health Insurance Coverage

A qualified policy would offer comprehensive insurance against the ordinary and catastrophic expenses of illness. Basic benefits in a 12-month policy period would include 60 days of inpatient care in a hospital or extended care facility (but any two days in an extended care facility would count as one of the 60 days). Other basic benefits would provide emergency and outpatient services and all medical services provided by doctors of medicine or osteopathy. The catastrophic expense protection would pay incurred expenses for benefits in excess of the basic coverage, including hospital, extended care facility, inpatient drugs, blood, prosthetic appliances, etc.

Deductibles

A policy purchased under this program will contain:

a) Under the basic coverage—a deductible of $50 per hospital stay, and 20 per cent coinsurance of the first $500 of medical expense and on the first $500 of emergency or outpatient expenses; and

b) Under the catastrophic illness provisions —a corridor, between the basic coverage and the catastrophic illness coverage, of expenses to be incurred by the beneficiaries before payments under the catastrophic illness provisions would begin. The amount of the corridor would be based on taxable income (that is, net income after all tax deductions and personal exemptions): 10 per cent on the first $4,000, 15 per cent on the next $3,000, and 20 per cent thereafter.

A family of four, having an adjusted gross income of $6,100, would have a taxable income (after all tax deductions) of $2,900. Its corridor would be 10 per cent of $2,900, or $290.

Health Insurance Advisory Board

A health insurance advisory board of 11 members, a majority of whom shall be practicing physicians, and including the Secretary of HEW and the Commissioner of Internal Revenue and other persons qualified by virtue of education, training, or experience, would be appointed by the President with Senate consent. The Board would establish minimum qualifications for carriers, and in consultation with carriers, providers and consumers, would develop programs designed to maintain the quality of health care and the effective utilization of available financial resources, health manpower, and facilities. It would report annually to the President and Congress.



More About Peer Review

Medicare came upon the scene a few years ago, contrary to our judgement or choice; but most physicians have tried honestly and consistently to adapt themselves to this new order and, distasteful as it has been, have tried to make it work as effectively as possible in delivering to the people the highest possible style of medical care.

The requirement of Medicare that all hospitals maintain utilization and review mechanisms has been accepted graciously and implemented to the best of our ability. It has been useful and necessary in an effort to keep moving the senile and chronically ill beneficiaries of Medicare and Medicaid and in order to have at least a reasonably flexible accomodation for the acutely ill.

Still there are many people who, believing 60 days of hospitalization at government expense, as was advertised, is their right, resent the transfer of their dependents to extended care facilities where all too often they are refused continued treatment, because, in the opinion of the administrator, they do not qualify. A large percentage of E.C.F.'s have withdrawn from the program, because they found it impractical to operate under the restrictions imposed.

Now, with a vast extension of federal medical care anticipated, our legislators question the efficacy of our performance of peer review and propose to monitor it by super-utilization committees, styled Professional Standards Review Organizations—PSRO, for short—which are to be administered in part, or even supervised, by various appointees outside the medical profession.

Two measures, separate Social Security Amendments, were presented before the Senate and House during the last Sessions of Congress proposing such extension of peer review. Both measures were passed by the respective Houses, but did not become law because there was not sufficient time before adjournment to coordinate the two. Almost certainly the process will be renewed, and probably adopted, by the present Congress.

In reviewing the amendment presented by Senator Wallace F. Bennett (R-Utah), one gathers that he bases his proposal upon the assumption that the fantastic increase in the federal cost of Medicare and Medicaid is very largely because physicians have been negligent in trying to curtail expenses. Unnecessary hospital admissions, prolonged stay, and over-utilization of diagnostic, therapeutics, and consultative services are cited as the principal factors. It is frankly charged that the physicians' present systems of review do not work effectively.

With these assumptions, we do not agree. Our efforts have been effective, and the concern to use Medicare and Medicaid as means to provide good care to the ever-increasing number of beneficiaries has been honest and sincere. The unanticipated increase in cost can, of course, be attributed in some measure, but a small proportion indeed, to the abuse noted above. It is very probable, however, that the increased cost to the government for establishing and operating so large a PSRO mechanism as proposed would exceed its savings.

That some physicians purposely or carelessly abuse Medicare and Medicaid for personal

gain is admitted, but the percentage of the whole profession is exceedingly small and the increase in cost to the government is not so great as frequently advertised. Constant effort is made to discourage this by our present means of peer review, both in the hospital and in outpatient praetice. We have learned also by bitter expcrience that there are limits beyond which discipline is not safe.

In every state, physicians, in the effort to eorrect abuses, have discharged colleagues from the hospital staff, only to have their action nullified by court procedures, with resulting bitterness and sometimes suits for damages filed against them and the hospital—and won.

Chronie violators outside the hospital have been brought before our Boards of Health and their licenses to practice revoked, followed by eourt action with complete restoration of their privileges; and the violators have, thereafter, pursued their erratic and fraudulent courses. It is very doubtful that a superstructure such as PSRO will be more effective.

Our profession has had long experienee in peer review. Forty or more years ago there began to be formed in some of the better hospitals, tissue eommittees, the function of which was to review surgical practices and discourage unnecessary operations and the removal of normal organs. This seemed to be, and still is, a very fine thing. Eventually the idea spread, and all well-regulated hospitals have for many years diligently followed this practiee. Like every good innovation, the concept expanded to the review of other praetices in hospitals, to assure that the medical profession delivered the best care of which it was capable to the trusting and dependent public.

Beyond the hospital, inferior grades of medical service were sought and physicians providing it were brought to account by their colleagues. Professional standard and grievance eommittees became the vogue; they performed, and are still giving, invaluable aid in the delivery of better medical care.

With the advent of third-party participation, and before Medicare, the idea of peer review of all in-hopsital and out-hospital care became greatly extended, until all phases of practice became subject to close scrutiny from one angle or another.

We became the most quality and honesty conscious of all professions. Every physician, theoretically, has a keen eye on his fellow. The members of the utilization and competence committees of this year fall under the scrutiny of next year's committees, so that eventually everybody has his turn to watch or be watched.

Many features of our forms of federal medieal care are both distasteful and unrealistic. Diffieulties in the operation and tremendous increases in costs apparently not anticipated by the designers have developed.

The providers of medical care—physicians and hospitals—have unjustly been blamed. The causes are more basic. The planners promised more than they are able to deliver. No amount of peer review among physicians can eorrect that defect. We will, of course, continue as before, our efforts, but we reject the disproportionate share of blame with which we have been charged.

Sam A. Overstreet, M.D.

Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Dear Editor:

As a physician involved in "Medical Care in Poverty Areas," I read the "Message from the President" in the February, 1971, issue of the *Journal of The Kentucky Medical Association* with interest and astonishment. If this is the image people have of our areas, it is no wonder that a bill was passed to "provide (financial) 'incentives' to physicians to practice in poverty areas." In objecting to these incentives, I am in accord with the President of the Association, but for a different reason: financial inducements by themselves are unlikely to overcome the resistance to locating in our area. And I fear that resistance can only be exacerbated when the respected President of our Association extols a doctor's "home in nice surroundings in a city" as a contrast to living "in a rural poverty area" where "he would almost have to be in residence and leave educational and cultural opportunities for his family up for grabs."

Southeastern Kentucky is generally considered to be one of the poorest areas in the state, yet I know of no physicians practicing here who find this area "unliveable." The "Message from the President" to the contrary, we do have "sewerage, adequate heat, adequate schools," and "even a Ford garage"—in fact, even a country club. Our families live as well as most physicians' families any place in the country and have many "advantages" that are difficult, inconvenient, or impossible to find when one lives and practices in a city. Cultural opportunities are, it is true, less convenient, but by no means inaccessible.

Our principal quarrel with living in a rural poverty area is the difficulty we have in persuading other physicians to join us in our work, share the load, increase the variety of services that we can offer our patients, and help us improve the quality of care. It must be that the long years of conditioning to urban medicine in medical school and graduate training have contributed to the general lack of familiarity with rural medicine and the aversion to it. Yet we country cousins have the professional satisfactions of working in fine, well-equipped, small, modern hospitals. Thanks to group practice, many of us have multi-specialty back-up and can practice good medicine, yet enjoy fairly regular hours. In our professional and personal lives, we are spared the frustrations and hectic pace of the urban rat race. We and our families enjoy living among beautiful mountains, with innumerable opportunities for healthful outdoor living and playing. Furthermore, our patients tend to be the most grateful in the world, and this adds to the satisfactions of practicing here.

It will be difficult for us to induce other physicians to share the better life and work we enjoy in rural Kentucky until the prevalent misconceived attitude expounded in the "Message from the President" is changed. I hope the publishing of my protest may be one step toward that change.

Leo L. Leveridge, M. D.
The Daniel Boone Clinic
Harlan, Kentucky

EDITOR'S NOTE: The Editorial Board of The Journal forwarded Doctor Leveridge's letter to John C. Quertermous, M.D., President of KMA. The following is his reply.

Dear Editor:

It is a source of pleasure and reassurance to me that the KMA *Journal* and the President's Page are read by the profession, even though the contents are not always agreed with. A response to our offerings is always welcome because of the stimulation for thought and debate that is made possible. The issues at hand demand as much discussion as we can muster.

Leo L. Leveridge, M.D., of the Daniel Boone Clinic, has taken me to task because of an apparent difference of opinion concerning the definition of a medical rural poverty area.

My own definition of such an area would be one of the 19 or more counties with populations of from 1.2 to 9.7 thousand people with from zero to two physicians. This sad picture is only part of the socio-economic deprivation of these communities.

By way of contrast, Harlan County, with a population of 36,596, has 49 physicians—26 or more of them practice in the Daniel Boone Clinic and only four of these are in family practice (according to the 12th edition of the Kentucky Medical Directory). This population-physician ratio of roughly 700:1 compares extremely well with the most favored areas. Therefore, according to my calculations, Doctor Leveridge and his group are not qualified to speak as a group practicing rural poverty medicine.

Comparatively, the Harlan doctor is living in a community of plenty, practicing "ivory tower" medicine, and acting as consultants to the true primary rural poverty area doctor who, in my estimation, is the one motivated by the true missionary spirit. Kentucky has this missionary type of doctor, especially in the areas mentioned, but not in sufficient numbers.

Senior student, Grady Stumbo, of the U. of K. Medical School, hit the nail on the head when he said, in effect, that the medical school teachers are not doing enough to orient young graduates toward these areas. Maybe more lessons in humility and courage should be taught along with the scientific courses. It takes a lot of both for a young man to take his advanced knowledge into areas where he will never have an opportunity to use a good part of it.

As I indicated in the "message," a man just doesn't make these decisions very easily.

John C. Quertermous, M.D., President
Kentucky Medical Association

ORGANIZATION SECTION

KMA Trustee Districts Hold Annual Meetings

The Third, Fourth, Twelfth, and Thirteenth Trustee Districts of KMA are planning annual meetings during April and May. The First, Second, Seventh, and Tenth Districts recently held their annual sessions.

April 22 is the date selected by the Fourth Trustee District for a meeting in Elizabethtown, according to W. Bruce Hamilton, M.D., Shepherdsville. The Twelfth District will meet on April 28 at the Danville Country Club, with Robert N. McLeod, Jr., M.D., Somerset, presiding.

J. Wesley Johnson, M.D., Ashland, announced that the Thirteenth District will meet at the Ashland-Ironton Holiday Inn in South Point, Ohio, on May 4. Thornton E. Bryan, Jr., M.D., Cadiz, has notified the Headquarters Office that the Third District will meet on May 18. The time and place will be announced at a later date.

Lee C. Hess, M.D., Florence, Chairman of the KMA Board of Trustees, and Marvin A. Bowers, Jr., M.D., Louisville, Chairman, KMA Claims and Utilization Review Committee, were the guest speakers at the Tenth District meeting, March 9. David A. Hull, M.D., Lexington, presided.

The Second District meeting featured John C. Quertermous, M.D., Murray, KMA President, and Doctor Bowers at a meeting on March 18. Charles C. Kissinger, M.D., Henderson, presided.

The First District met March 24 in Paducah, the Seventh District on March 31 in Frankfort. More news of these meetings will appear in the May *Journal.*

Ky. Congressional Delegation Honored By KMA

All of Kentucky's Representatives and both U.S. Senators attended the 14th Annual KMA Washington Dinner.

In addition to the Congressional delegation, others in attendance were administrative assistants, many KMA officers and members, and KMA Staff.

Prior to the dinner, which was held on March 16, a briefing session for those in attendance was held at the AMA Washington office on March 15.

Visits were also made on an individual basis with all of the members of Kentucky's Congressional delegation.

16 Member Ky. Delegation Attends Annual AMA/AMPAC Seminar

Prominent government figures were featured during the recent AMA/AMPAC Seminar held in Washington, D. C., on March 13-14, 1971.

Congressmen Richard Fulton, D.-Tennessee, Dan Kuykendall, R.-Tennessee, and Senator Robert Dole, R.-Kansas, were among those speaking at this annual event.

Hoyt D. Gardner, M.D., Louisville, Chairman of the AMPAC Board, announced that a new registration record was set during the 1971 session.

Those in attendance from Kentucky were:

Hoyt D. Gardner, M.D., Louisville, AMPAC Chairman
Donald C. Barton, M.D., Corbin
Cecil L. Grumbles, M.D., Louisville
Dallas C. Haag, M.D., Frankfort
Lee C. Hess, M.D., Florence
C. Kenneth Peters, M.D., Louisville
John C. Quertermous, M.D., Murray
Fred C. Rainey, M.D., Elizabethtown
Sandford L. Weiler, M.D., Frankfort
James G. Wilhite, M.D., Lexington
Mrs. Hoyt D. Gardner, Louisville
Mrs. William Pearson, Owensboro
Mr. Robert G. Cox, Louisville
Mr. Gilbert L. Armstrong, Louisville
Mr. Jerry E. Mahoney, Louisville
Mrs. Fay Miles, Louisville

KMA INTERIM MEETING

Since the 1971 KMA Interim Meeting took place shortly after press time, it was not possible to include a follow-up story on the meeting in this issue of *The Journal.* Complete coverage will appear in the May issue.

KAGP Meeting To Feature Outstanding Speakers

Corbett H. Thigpen, M.D., Augusta, Georgia, renowned psychiatrist and author, will be one of the featured speakers at the Twentieth Annual Assembly and Scientific Session of the Kentucky Academy of General Practice. To be held May 4-6, the meeting will be at the Seelbach Hotel and Convention Center in Louisville, according to Ben F. Roach, M.D., Midway, President of KAGP.

Doctor Thigpen, author of the book, *Three Faces of Eve,* will present slides showing the four personalities present in the patient on which his famous book was based. This presentation will follow the banquet on May 5.

A Crackerbarrel Session will be featured on May 4. Subjects to be discussed are "Neurology Anyway You Like It," led by James W. Davis, M.D., Louisville, Neurologist; and "Tonometry, Practical When, Why and How," a teaching session led by C. Dwight Townes, M.D., Louisville, Ophthalmologist.

Among the subjects of talks presented during the May 5 and 6 scientific sessions are: "Sex Education and the Physician," by Doctor and Mrs. J. C. Willke, Cincinnati; "Evaluation of Patient with Chest Pain," by Gottlieb Friesinger, M.D., Nashville; and "Characteristics of a Specific Perceptual Motor Disability," by Charles Shedd, Ph.D., Birmingham. These sessions are open to teachers.

The KAGP assembly will also include a meeting of the Congress of Delegates, presentation of special awards, and the installation of officers.

The scientific program is acceptable for 17 1/2 prescribed hours accredited by the American Academy of General Practice.

Ky. Radiologists Are To Hold Spring Meeting, April 29

The Kentucky Chapter, American College of Radiology will hold a spring meeting, April 29, at the Continental Inn in Lexington.

John A. Campbell, M.D., Professor and Chairman of the Department of Radiology, Indiana University School of Medicine, will be the featured speaker. Beginning at 8 p.m., Doctor Campbell will speak on "Roentgen Bloopers in GI Diagnosis."



Doctor Campbell

A graduate of the University of Cincinnati College of Medicine in 1937, Doctor Campbell interned at the Detroit Receiving Hospital, completed his postgraduate residency in radiology at the Henry Ford Hospital in Detroit, and was certified as a Diplomate of the American Board of Radiology in radiology and nuclear medicine in 1941.

Doctor Campbell is a Fellow of the American College of Radiology, Radiologic Consultant to the Radiation Control Commission of the Indiana State Board of Health, and Consultant in Radiology to the Surgeon General of the United States Air Force.

Medical Assistants Are To Meet In Madisonville, May 14-16

"To a Greater Horizon" is to be the theme of the Ninth Annual Convention of the Kentucky Society, American Association of Medical Assistants.

Scheduled for May 14-16 at the Ramada Inn in Madisonville, the meeting will feature carefully selected speakers on stimulating subjects for the medical assistant.

Among the speakers for the educational session are Loman C. Trover, M.D., Madisonville, Medical Director of the Trover Clinic. He will discuss "One Concept of Comprehensive Care Delivery." Mrs. Marie Young, Indianapolis, President of the American Association of Medical Assistants, will be a featured participant.



Doctor Trover

William Jernigan, M.D., Madisonville, will be the guest speaker at the Saturday evening banquet and Robert Long, M.D., Louisville, will speak at the Sunday luncheon. Doctor Long's topic will be "Horizons Unlimited."

All medical assistants are invited to attend the convention by Mrs. Guthrie Veech, Louisville, President of the organization, and by Mrs. Viola Rich, Madisonville, Convention Chairman.

Kentucky Pediatricians Plan Spring Meeting, May 12-13

The Kentucky Chapter, American Academy of Pediatrics, will hold a spring meeting May 12-13 at the Bellefonte Country Club in Ashland. The meeting will combine scientific sessions with the Annual Gerber Golf Tournament.

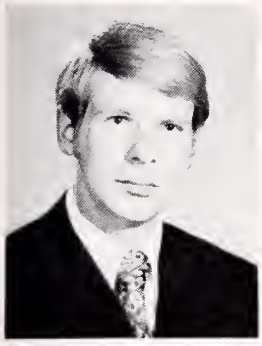
Topics to be discussed during the scientific sessions on May 12 are: "Radiologic Evaluation of Dyspnea in Pediatrics," by Larry Elliot, M.D., Gainesville, Florida; "Clinical Aspects of Heart and Lung Disease," by Jacqueline Noonan, M.D., Lexington; and "Mutual Respect Approach to Child Guidance," by W. Hugh Missildine, M.D., Columbus, Ohio.

A business meeting, to be held at 4:30 p.m. on May 12, will be presided over by Guy C. Cunningham, M.D., Ashland, State Chairman of the Kentucky Chapter, AAP.

Jay M. Arena, M.D., Durham, N.C., and Warren Wheeler, M.D., Lexington, are among the May 13 speakers.

Charles W. Schmidt Joins KMA Staff

Charles W. Schmidt, a twenty-seven year old native of Louisville, is the most recent addition to the KMA Staff.



Mr. Schmidt

He is a 1971 graduate of Bellarmine College and became an Executive Assistant at KMA as of March 1, 1971.

In his new position, he will work closely with Executive Director Robert G. Cox in performing administrative duties of the Association, including work with many KMA committees.

Mr. Schmidt is married to the former Diana Rose of Louisville and resides in Jeffersontown.

Community Health Week Set For May 2-8

The focus of the 1971 Community Health Week, to be held May 2-8, will be on immunization, according to John M. Baird, M.D., Chairman of the KMA Community and Rural Health Committee. Plans for the observance include a request for an official proclamation by Governor Louie B. Nunn. Other state organizations will join KMA in urging all Kentuckians to check their immunization needs.

Doctor Baird urges all KMA members and allied groups to take an active part in Community Health Week by displaying posters promoting this annual occurrence and by checking the immunization status of their patients.

"Proper immunization," he noted, "will eliminate the fear of diptheria, polio, tetanus, and smallpox. The 172 cases of pertussis which occurred in Kentucky this year probably could have been prevented by proper immunization." He stressed that immunization must be a year-round program, and that not only school-age children, but also younger children and adults should avail themselves of the vaccines which afford protection against these deadly diseases.

It was pointed out that proper immunization has resulted in Kentucky's not reporting a new case of poliomyelitis since 1963, when a vigorous vaccine campaign was conducted to rid the state of this crippling disease.

The chairman added that the new measles vaccine has reduced the number of rubella cases in Kentucky from 2100 in 1967 to 984 in 1970. He urged that parents get their children properly immunized against it.

Blue Cross Board Announces Two Physician Changes

J. Ed McConnell, President of Kentucky Blue Cross and Blue Shield, has announced two physician changes in the Blue Cross Hospital Plan, Inc. Board of Trustees. At the annual meeting in February, the Blue Cross Board of Trustees named H. Hart Hagan, M.D., Louisville, Director Emeritus, and elected J. Thomas Giannini, M.D., Louisville, to the Board.

Doctor Hagan was a member of the original Blue Cross Board of Trustees in 1938 and has served as a Board member since that time. Doctor Hagan attended Georgetown College, Georgetown, Kentucky, and graduated from John Hopkins University in 1913. He became a member of the Jefferson County Medical Society in 1918 and an Emeritus Member of the Society in 1966.

Doctor Giannini, in addition to being elected to the Board of Trustees, was named to the Blue Cross Executive Committee. He graduated from the University of Louisville School of Medicine in 1938, served in the U.S. Navy Medical Corps from 1942-1954, and has served the Kentucky Medical Association as a delegate to the American Medical Association since 1963.

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Ky. Pioneer Physician Honored By Southern Publication

The following article appeared in *The Bracken County News* on February 18.

James M. Stevenson, M.D., Brooksville's beloved physician and surgeon, has been selected to appear in the 1971 edition of *Personalities of the South*. The publication is published annually to recognize outstanding leaders in the South. Doctor Stevenson was among 4,000 citizens selected from the 15 southern states. Biographees chosen for this publication have contributed to the life of their community either by professional or civic clubs; national, state, and regional associations; and as individuals.

Doctor Stevenson served as Captain in the U.S. Medical Corps from 1917-1919 and received the Presidential Citation for service in the USO during World War II. He was a member of the KMA Board of Trustees from 1943-61 and Chairman of the Board during 1960-61. He has, also, been a member of the Board of Education for 12 years. Doctor Stevenson is Director of the First National Bank of Brooksville, Past-President of the Brooksville Lion's Club, and a Past-Master of Brooksville Masonic Lodge No. 154. He received the 1969 "Outstanding General Practitioner" Award of KMA. Doctor Stevenson is a member of the official board of the Brooksville United Methodist Church.

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The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



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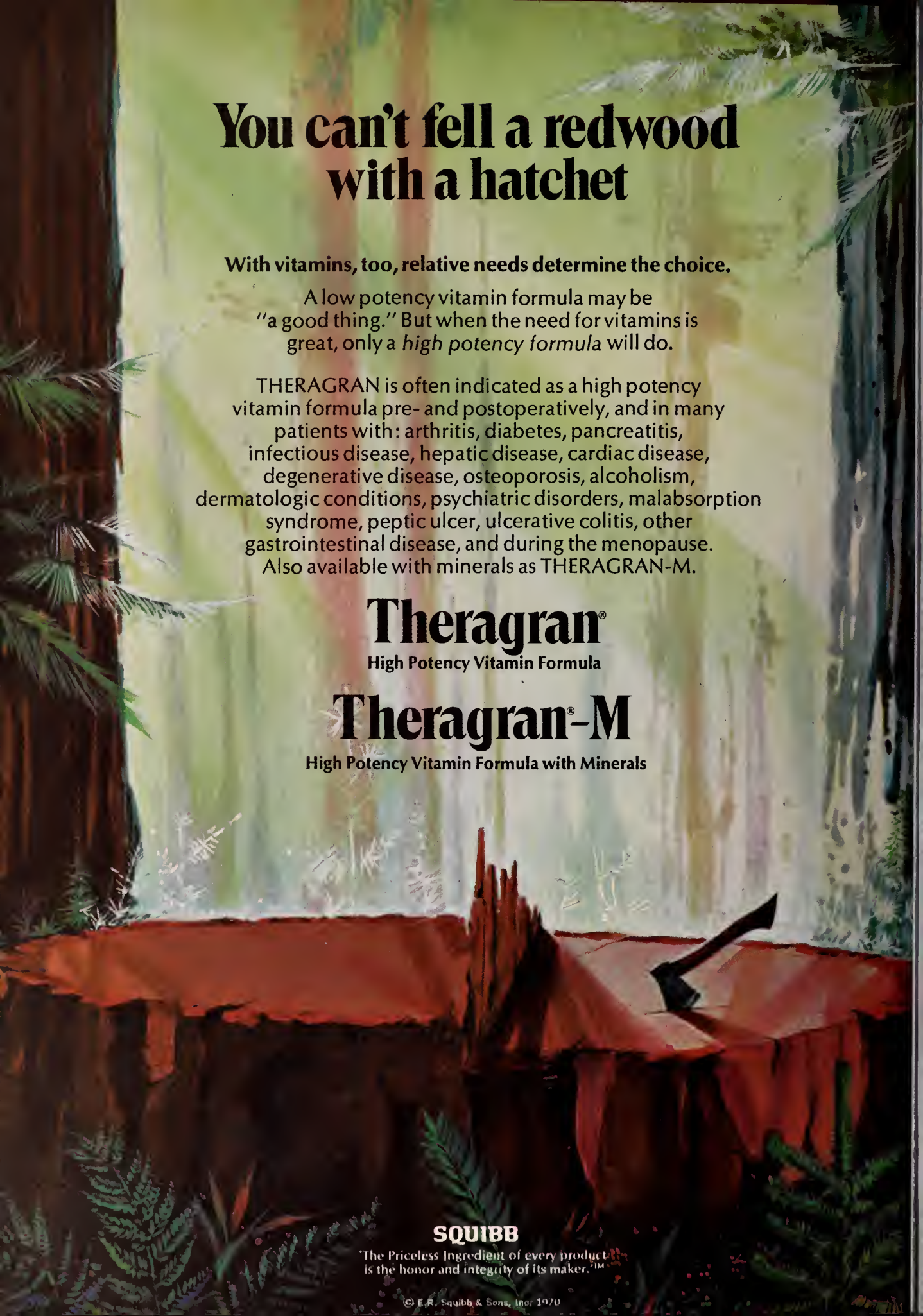
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Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenamena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastraintestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

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(quinine sulfate 260 mg., aminaphylline 195 mg.)

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Surfak prevents constipation:

- **naturally**
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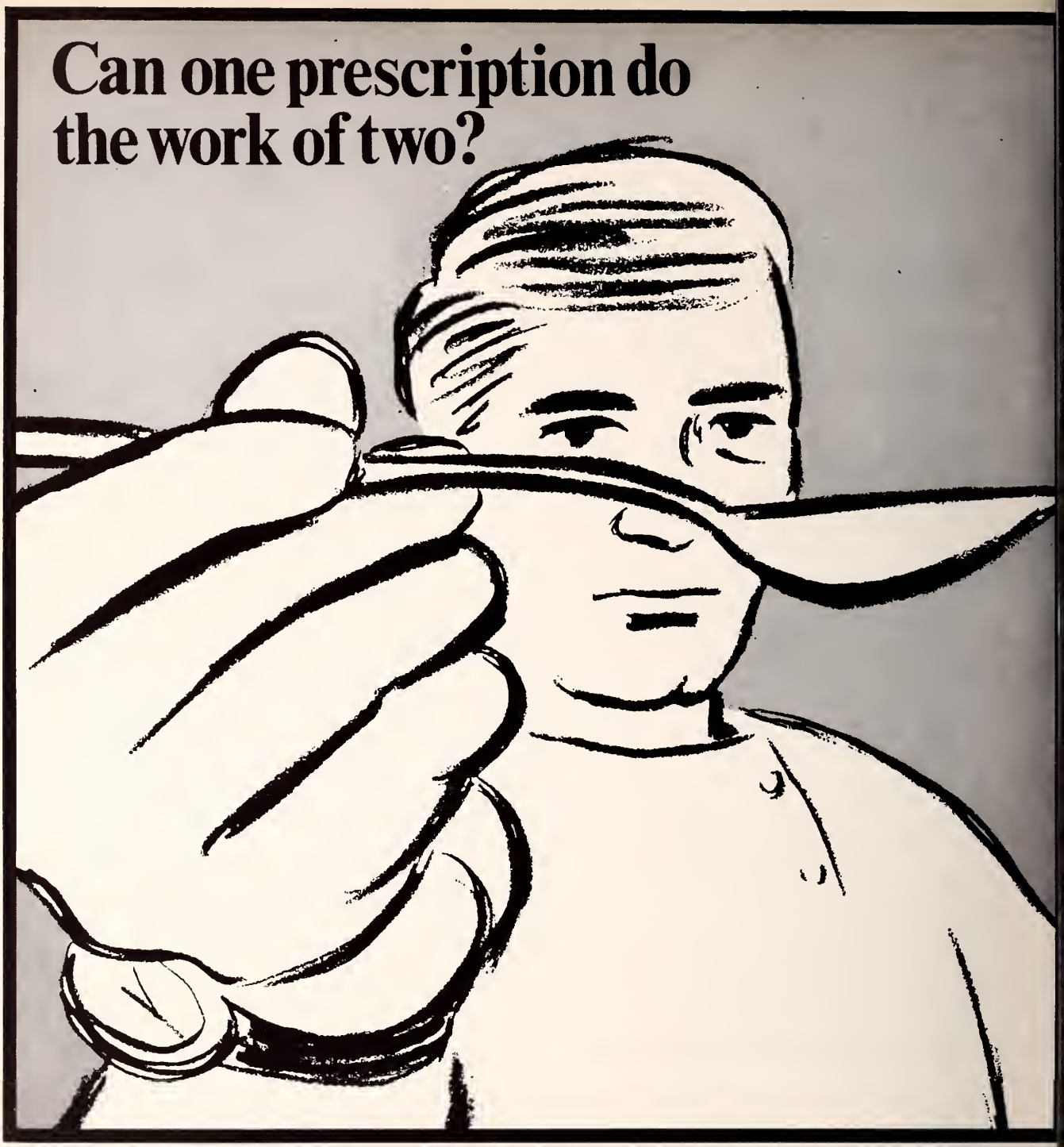


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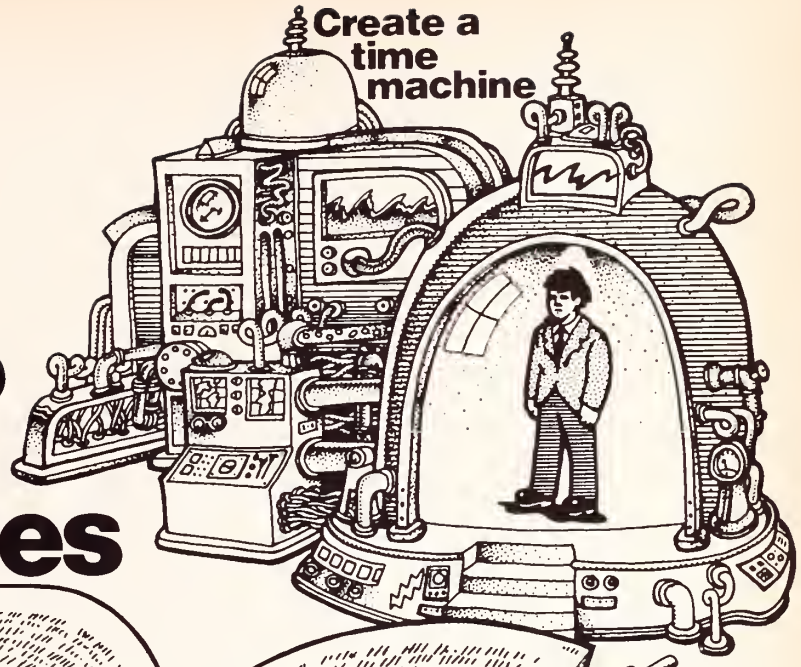
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FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool.

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Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964

When irritable colon feels like this



..in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids--for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
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Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



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Until you need it.

Such as the time when a penicillin-sensitive patient presents the potential for a severe allergic reaction.

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See next page for brief summary, listing indicated organisms, precautions, etc.

Erythrocin®

(ERYTHROMYCIN, ABBOTT)

Brief Summary

Indications

Erythrocin is indicated against gram-positive cocci — staphylococci (most strains), pneumococci and streptococci (including enterococci). Active against other pathogens, such as *Corynebacterium, Hemophilus, Clostridium, Neisseria,* and *Treponema pallidum,* the agents causing trachoma and lymphogranuloma venereum and primary atypical pneumonia caused by *Mycoplasma pneumoniae* (Eaton agent). Establish susceptibility of pathogenic organism when practical. Maintain therapeutic levels for ten days in the treatment of streptococcal infections to help prevent rheumatic fever and glomerulonephritis. Also consider local measures or surgery whenever indicated.

Contraindications

Known hypersensitivity to erythromycin. I.M. preparation also contraindicated in patients hypersensitive to the "caine" type of local anesthetics.

Precautions, Side Effects

Occasionally abdominal discomfort, cramping, nausea or vomiting may occur; generally controlled by reduction of dosage. Mild allergic reactions, such as urticaria and other skin rashes, may occur. Serious allergic reactions have been extremely infrequent; if hypersensitivity is encountered consider appropriate countermeasures, e.g., epinephrine, steroids, etc., and withdraw drug. The rare possibility of overgrowth of nonsusceptible organisms should be kept in mind; if it occurs withdraw drug and institute appropriate treatment. Local venous discomfort, generally mild, may occur with I.V. administration. I.M. preparation is suitable for deep intramuscular administration only; restrict use in children with small muscle mass. A mild transient local discomfort sometimes occurs following rectal insertion of Erythrocin Suppositories; discontinue if significant discomfort persists.

Administration and Dosage

I. ORAL: In adults with mild to moderate infections caused by readily-susceptible organisms 1.0 Gm. daily; more severe infections or those caused by less susceptible organisms 2.0 Grams daily; unusually severe infections up to 4 or more Gm./day. Daily dose in children is 15 to 25 mg./lb./day depending upon severity of infection. Daily dose should be administered in divided doses at 4-to-6 hour intervals. Continue treatment for at least 48 hours after symptoms have subsided and temperature has returned to normal. In fulminating or life-threatening infections, a parenteral form of erythromycin is preferred.

II. PARENTERAL: Intravenous administration may be continuous or intermittent (6 to 8 hour intervals); 1 to 4 Gm. daily in adults; 15 to 25 mg./lb./day in children, depending upon severity of infection. Recommended I.M. dose is 100 mg. (2 ml.) for adults, 50 mg. (1 ml.) for children 30 lbs. or more and 1.4 to 1.8 mg./lb. in smaller children. Injections are usually given at 6 to 8 hour intervals; may be given at 4 to 6 hour intervals for severe infections.

III. RECTAL: Following therapeutic doses are recommended in children: to 20 lbs., 1-125 mg. suppository every 8 hours; 20 to 40 lbs., 1-125 mg. suppository every 6 hours.

Change to oral therapy as soon as practicable.

103305

The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
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Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

Clinical supply available to physicians.

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Manufacturers of Ethical Pharmaceuticals

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400 mg./100 mg. S/C tablets

Trocinate relaxes all smooth muscles. Its direct action (musculotropic) does not involve the autonomic nervous system and it is not mydriatic. It is metabolized by the body and eliminated in the urine as harmless degradation products. Trocinate has a remarkable history of freedom from side-effects.

When a pure direct-acting smooth muscle relaxant is indicated, Trocinate is the drug of choice.

DIARRHEA (functional) . . . *the first 400 mg. tablet usually relieves the discomfort of diarrhea so promptly that it ceases to be a bother.*

DIVERTICULITIS—MUCOUS COLITIS . . . *the accompanying discomforts can be relieved by this direct smooth muscle relaxant.*

BLADDER SPASM . . . *relaxation is immediate. One or two tablets condition the bladder for cystoscopy in one hour.*

SPASTIC URETER . . . *the specific relaxing effect of Trocinate on the spastic ureter has been proven by animal studies and affirmed clinically. (J. Urol. 73:487-93)*

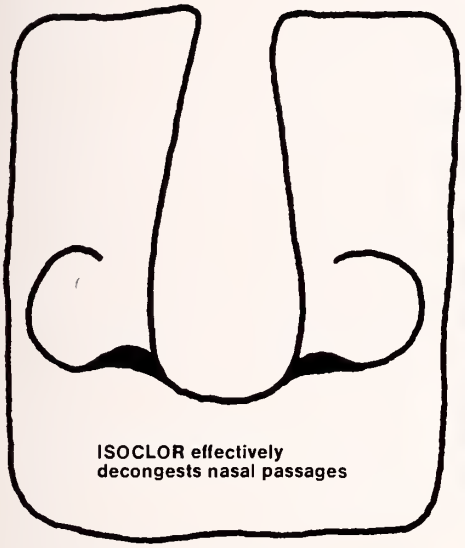
PRESCRIBING INFORMATION

WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

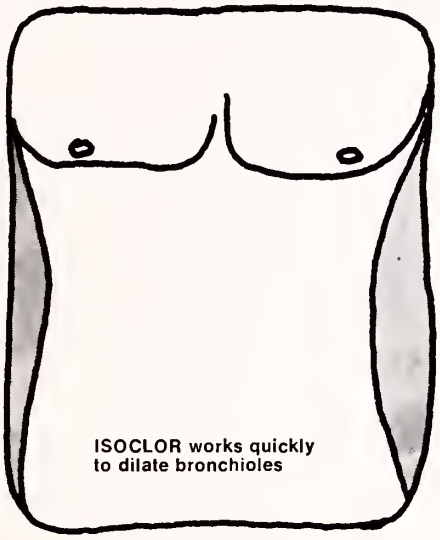
NOTE: *The high therapeutic index of Trocinate permits its administration in dosage sufficient to relieve smooth muscle spasm promptly. 400 mg. dosage usually creates a therapeutic blood level. In reducing dosage after relief, lengthening the time between dosage rather than lessening the recommended dose is preferable. The prompt direct action allows a consciousness of the first suggestion of return of symptom . . . a guide to dose spacing and to determining when treatment is complete. A prescription for twelve or sixteen 400 mg. tablets will usually correct spasm and leave a few tablets for a reserve.*

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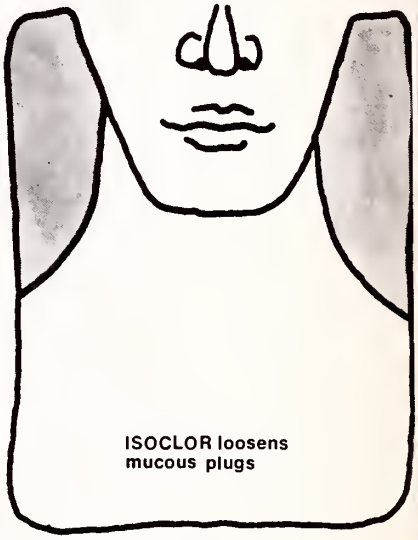
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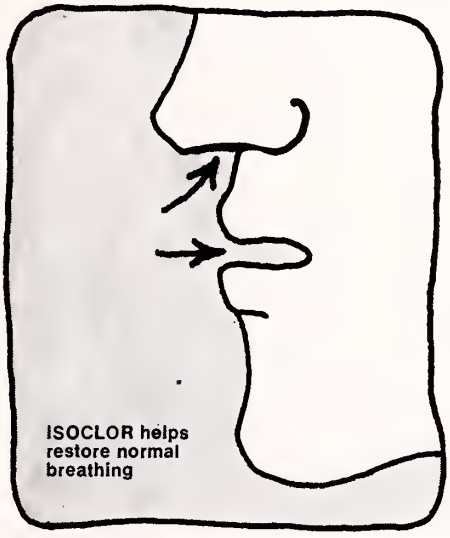
ISOCLOR works quickly to dilate bronchioles



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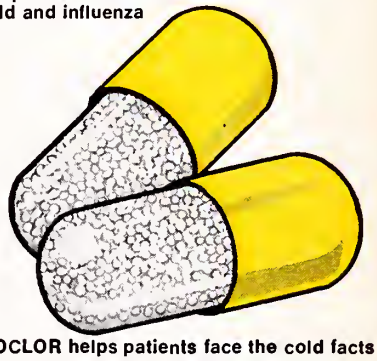


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COMPOSITION: Each tablet or 2 teaspoonfuls of liquid contains:
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Pseudoephedrine HCl.....25 mg.

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INDICATIONS: For symptomatic relief of colds, hay fever, allergic conjunctivitis, perennial rhinitis of allergic origin and sinusitis. Opens nasal, sinus and bronchial passages orally.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

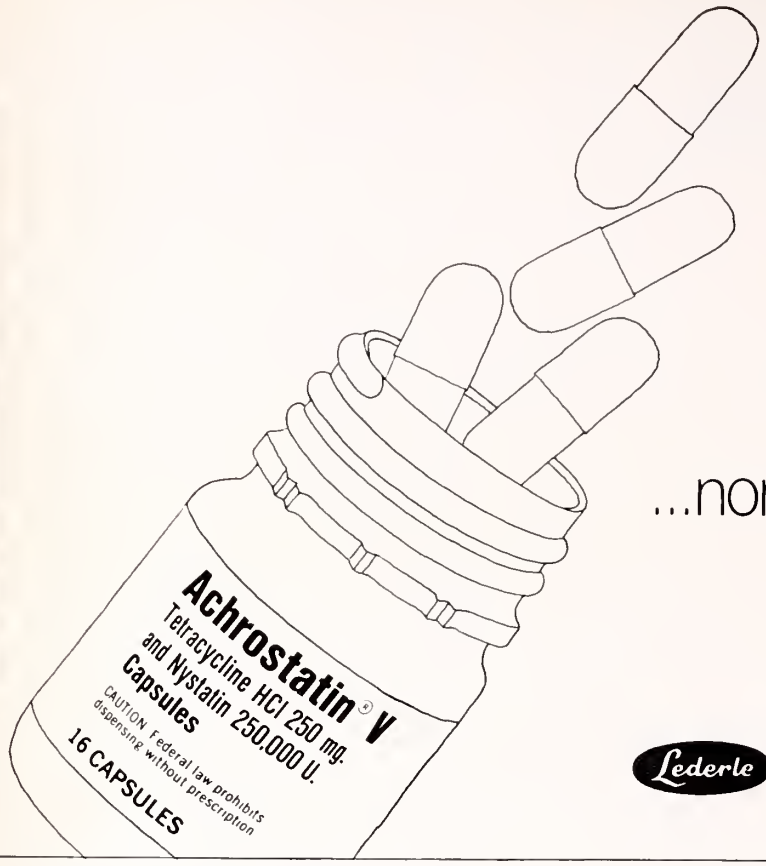
PRECAUTIONS: Use with caution in patients suffering with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100 and 1000. Liquid: 4 oz. bottles, pints, and gallons; Timesules: Bottles of 50, 250, and 1000.

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Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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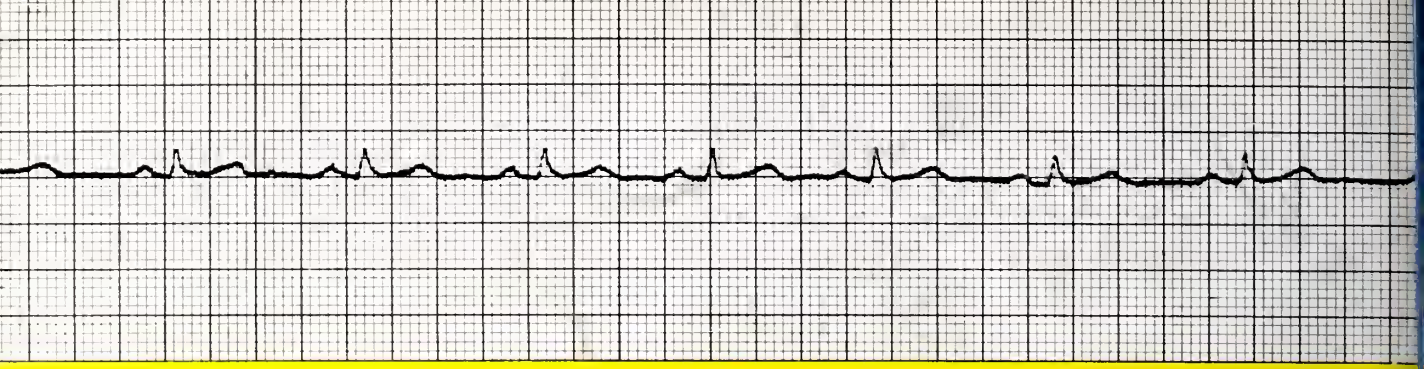
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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VOLUME 69 MAY 1971 NUMBER 5

The Journal of The KENTUCKY Medical Association



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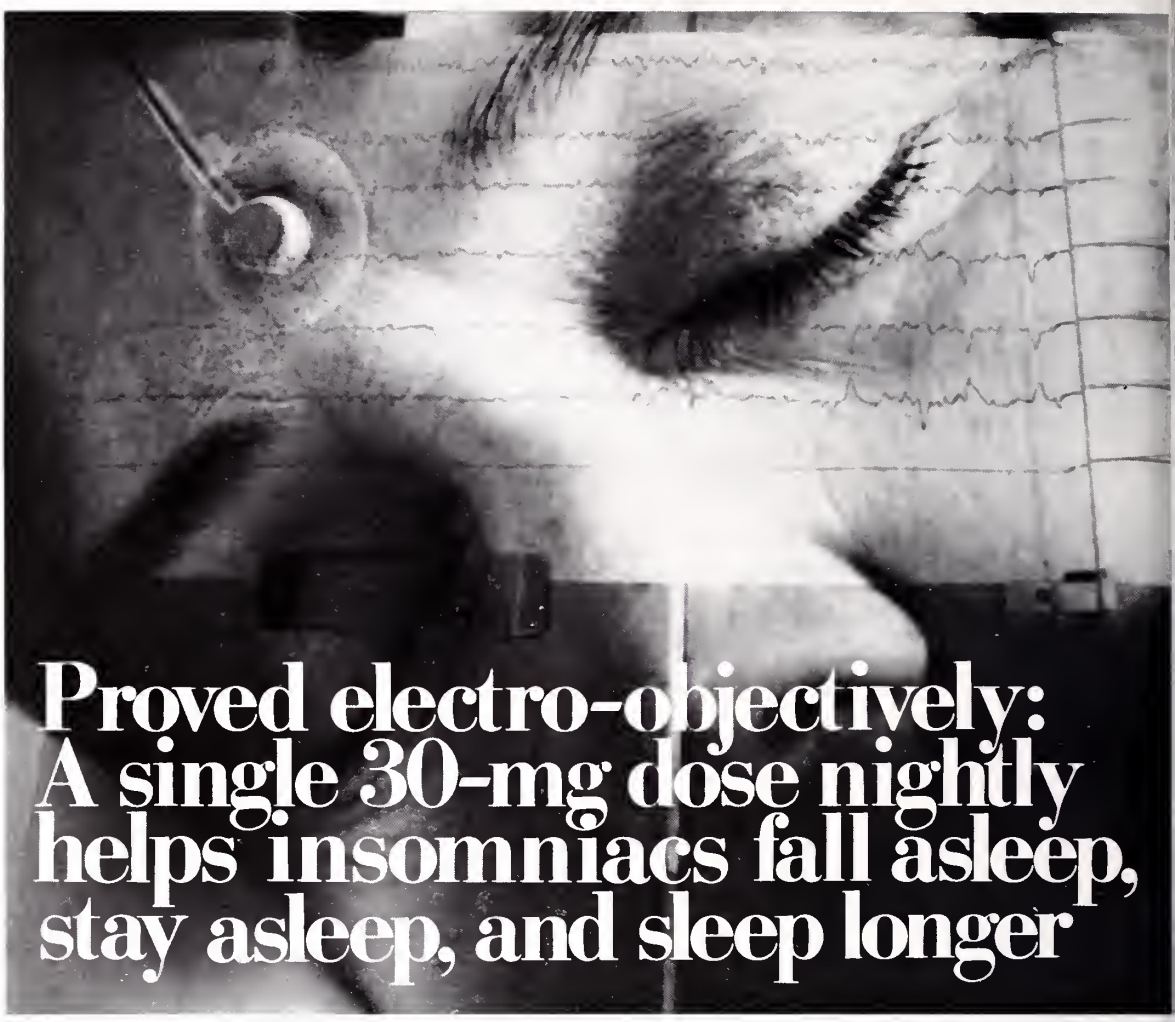
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KMA 1971 Annual Meeting
September 21-23
Convention Center, Louisville



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

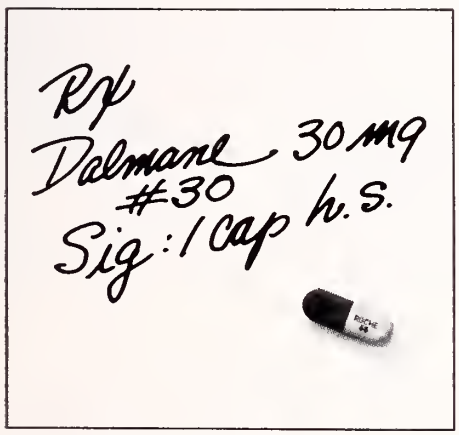
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.:* "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.:* "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

New **Dalmane®**
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Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity, have also been reported in rare instances.

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Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

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MESSAGE FROM THE PRESIDENT



The Board of Trustees of the Kentucky Medical Association has recently established a new committee, the Public Relations Committee. By the time this issue of *The Journal* is published, we will have met three times. It should not be surprising that we are experiencing the same problems of organization and direction which most new committees encounter.

What is public relations? Like Kenneth Clark's[1] view of civilization, I can't define public relations, but I think I know it when I see it. Since public relations deals with ideas, attitudes, and other intangibles, it cannot be defined precisely. However, to most of us, the term "public relations" connotes the efforts of an organization (or association) to gain the understanding and goodwill of the public and the profession. This, in turn, requires the use of a number of strategies, among which education, communication, and programming are examples.[2]

One of the problems encountered in the formulation of a public relations program is to view our goals too broadly. Much needs to be done, but we will founder should we exceed our organizational capacity. Rather, we have set upon a course which we believe to be realistic and capable of accomplishment. It includes:

1. Analysis of the public relations situation.
2. Definition of problem areas.
3. Establishment of specific objectives.
4. Planning of program.
5. Implementation of program.
6. Periodic evaluation of progress.

There is no assurance, and at this time certainly no evidence, that our efforts on behalf of the Association will accomplish anything worthwhile. We will make a run at it, and with the help of public relations consultant and with a competent staff, we may just succeed.

Robert C. Long, M.D.

CHAIRMAN, KMA COMMITTEE ON PUBLIC RELATIONS

References

1. Clark, Kenneth, *Civilization*, Harper & Row.
2. Lesly, Philip, *Public Relations Handbook*, Third Edition, Prentice Hall.

This is the third in a series of articles written at the request of KMA President John C. Quertermous, M.D.

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From The

KMA Postgraduate Medical Education Office

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MAY

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14 Postgraduate course, "New Approaches in Cancer Therapy," a symposium designed to explore those areas of cancer therapy where new approaches have significantly altered treatment; fee $25. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

14-15 Meeting, Kentucky Surgical Society, Lake Cumberland State Park, Jamestown

18 Postgraduate course, "Nutrition Conference," speakers include L. J. Filer, Jr., M.D., William McGanity, M.D., and Harold H. Sandstead, M.D.; no registration fee. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

19-21 Postgraduate course, "Ambulatory Care of Children," for professionals who care for children; fee $75. For further information contact Frank R. Lemon, M.D., College of Medicine, University of Kentucky, Lexington, Kentucky 40506

24 PANMED television series, "The Transient Ischemic Attack," KET 10:30 p.m. EST (9:30 p.m. CST)

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IN SURROUNDING STATES

MAY

12-13 Postgraduate course, "Advances in Dermatology," Cleveland Clinic Educational Foundation, Cleveland, Ohio

13-15 Conference on Patient Safety in the Hospital, sponsored by Professional Liability Committees of the American Hospital Association and American Medical Association; fee $25; the Palmer House Hotel, Chicago, Ill.

JUNE

1-5 Refresher Course in Diagnostic Roentgenology, Radiology Department of the University of Cincinnati College of Medicine. For further information contact Harold B. Spitz, M.D., Department of Radiology, Cincinnati General Hospital, Cincinnati, Ohio 45229

7-11 Postgraduate course, "Internal Medicine: Clinical Problems 1971," University of Cincinnati Medical Center, Cincinnati, Ohio.

20-24 Annual Meeting, American Medical Association, Atlantic City, N. J.

JULY

11-22 Lecture course in human sexuality, Institute for Sex Research, workshops in sex education and counseling; certificate of attendance; $325, includes housing; registration ends May 30. Write to Summer Program, Institute for Sex Research, Bloomington, Indiana 47401

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their summer and fall meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can to avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

MEDICAL SCHOOLS

Department of Anesthesiology
University of Louisville School of Medicine

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Staff:
Cecil W. Shafer, M.D., Associate Professor and Acting Chairman
(University of Louisville)
Thomas N. MacKrell, M.D., Associate Professor
(University of Pittsburgh)
Donald M. Thomas, M.D., Associate Professor
(University of Pennsylvania)
Frank D. Green, M.D., Instructor
(University of Pennsylvania)

The educational program for both undergraduate and graduate students of medicine is conducted in the Louisville General and the Children's Hospital, where the Department provides clinical services.

Undergraduate, as well as graduate educational programs, are patient oriented, with emphasis on acute medicine as seen in the Emergency, Operating, and Recovery Rooms of a busy metropolitan and a specialty hospital. The undergraduate is introduced to didactic material in case reviews and informal discussions in a minimum of formal lectures. Clinical experience in cardiopulmonary resuscitation, management of the unconscious patient, and the prompt measures for treatment of severely injured are provided.

Our graduate training program in Anesthesiology is approved for three years' residence, with opportunity for training in specialized areas of anesthetic management, such as, for pediatric surgical, cardiovascular, and neurosurgical patients. Practical experience in management of a variety of elective surgical patients and the traumatically injured is readily obtained, as individual residents conduct an average of 40 cases per month.

One of our staff devotes his entire clinical experience to the operation of the Emergency Room. Opportunity for special training and experience with emergency medical problems is offered at present on an informal basis.

The didactic lectures on Anesthesiology and related basic science subjects are provided twice weekly on Tuesday and Thursday afternoons at 3 p.m. and are open to the interested medical practitioner.

There are, at present, eight residency positions filled, and there are two Rotating Eight internship positions budgeted and available July 1, 1971. Resident appointments are available at irregular intervals, and the two or three year program is offered.

Research interests in the Department are directed toward the management of drug intoxication and the study of uptake and distribution of volatile anesthetics and the influence of anesthetics on ion transport mechanisms. Well equipped laboratories are operated by the Department, and a modest research program is being conducted.



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

Blue Shield and the Federal Employee Program

Q. What is the Federal Employee Program (FEP)?

A. A health care program administered by the Civil Service Commission for government employees. Employees are given the choice of enrolling with Blue Cross and Blue Shield or one of several commercial insurance carriers. Kentucky Blue Cross and Blue Shield now cover in excess of 65 per cent of all Kentucky government employees enrolled in the Program.

Q. How can members of the Federal Employee Program be identified?

A. Each subscriber is issued a "Blue Cross and Blue Shield Health Benefits Plan" Identification Card. The Card contains: employee's name, identification number (containing the prefix "R"), enrollment (coverage) code, effective date, and payroll office number.

Q. Are there different levels of Blue Shield coverage within the Federal Employee Program, and if so, how can they be identified?

A. The Enrollment (coverage) Code on the Identification Card is the key to the member's level of benefits. One of the following Codes will appear on each Card:

101—High Option, Self only
102—High Option, Family
104—Low Option, Self only
105—Low Option, Family

Q. What is the difference between the High Option and Low Option Plans?

A. For covered physician's services, High Option will pay the physician's Usual, Customary, and Reasonable charge in full. Low Option will pay a scheduled allowance toward the physician's charge.

Q. What physician services are covered under the Federal Employee Program?

A. Subject to specified limitations, covered services include: Surgery, Oral Surgery, In-Hospital Medical Care, Psychotherapy, Anesthesia Service, Assistant-at-Surgery, X-ray Services, Laboratory Services, and Radiation Therapy. In addition, High Option will provide payment for Intensive Medical Care and Consultations, other than radiological.

Q. How does the physician's office file for Basic Benefits?

A. Covered services under Basic Benefits should be filed on a regular Kentucky Blue Shield Physician's Service Report. High Option payments will be made direct to the Participating Physician or direct to the subscriber if the physician does not participate. Low Option payments will always be made direct to the physician unless Blue Shield is instructed otherwise on the Service Report.

Q. Do Federal Employee Program members have coverage over and above Basic Benefits?

A. Yes. Members are entitled to Supplemental Benefits which include reasonable and customary charges for necessary, covered services and supplies in or out of a hospital, when prescribed or ordered by a physician. There is a calendar year deductible of $100 for High Option members, after which High Option Supplemental will pay 80 per cent of covered charges to a $50,000 maximum. The deductible for Low Option is $150, after which Supplemental Benefits will pay 75 per cent of covered charges to a $20,000 maximum. Deductible amounts are per each member, not to exceed two deductibles per year for a family.

Q. How does the physician's office file for Supplemental Benefits?

A. The member is responsible for filing covered charges under Supplemental Benefits. The Supplemental Benefit Claim Form and itemized provider bill should be submitted to Kentucky Blue Shield, 3101 Bardstown Road, Louisville, Kentucky 40205. Payments under Supplemental Benefits will be made direct to the subscriber.

PUBLIC HEALTH PAGE

Modernization and Redirection of the State Health Department

WILLIAM P. MCELWAIN, M.D., M.P.H.

Commissioner of Health
Commonwealth of Kentucky

The State Health Department has been recently reorganized by Executive Order No. 71-225. The purpose of this reorganization was to structure our agency in such fashion as to facilitate the fulfillment of our statutory charge to protect and promote the health of the citizens of the Commonwealth.

Three main areas of responsibility have been identified, with a deputy commissioner position assigned to oversee each one.

The medical programs have a long history of contribution to the public health. The Epidemiology (mainly concerned with disease prevention), Maternal and Child Health, Laboratory, Medical Care, and Tuberculosis Control Divisions are in this group. These programs demand medical expertise in their development and conduct. The Deputy Commissioner for Medical Programs has not been named as yet.

The environment is becoming of increasing concern to our society and the world. Public health has been involved in the environment since the beginning.

Traditionally, public health had an interest only when an insult to the environment was shown to result in a specific disease process in man. This limited involvement is no longer satisfactory. Environmental insults that do not directly cause disease, but indirectly affect man by degrading the quality of his surroundings, are not acceptable. So the thrust of our efforts will be to maintain and improve the quality of our environment.

Mr. Ralph C. Pickard has been appointed Deputy Commissioner for the Environment. Ralph has a distinguished record in environmental activities and an international reputation of accomplishment. Divisions of Air Pollution Control, Water Pollution Control, Sanitary Engineering, Solid Waste, Environmental Services, and Occupational Environment have been formed to maintain our efforts in this area.

Professionals, in general, and health professionals, specifically, have been prone to relegate administrative activities to the position of a necessary evil. However, they are of paramount importance to us in the State Department of Health. Lives will be lost or saved on the basis of our ability to deliver service, and in many cases, this will be determined by the efficiency of our operation.

The magnitude and complexity of our funding requires the most sophisticated techniques for its best use. Idle money cannot be tolerated in this period of fantastic demands on limited resources.

The State Health Department and the 120 local health departments in the state employ approximately 1,600 people.

A work force of this size requires the highest type of personnel administration for its best

use. In general, we feel that the practice of management in the health services field should be of such caliber as to reflect the importance of these services to our society. Mr. Elbert Austin, Jr., has been appointed Deputy Commissioner for Administration. Al has an enviable record of achievement during his time in the health field, and we anticipate great help in the administration area from him.

While it must be true that organization charts do not deliver service, it must be recognized that they reflect the situation that exists in an agency as it prepares to do its job. We believe ours reflects our state of readiness.

Our redirection is basically a philosophical manner. Briefly stated, it is that service should be delivered by local agencies. Local health departments should be more aware of the local situation, closer to the community, and better able to deliver the service.

The State Health Department should function in the role of an assistant. We have highly trained people and complex equipment that can furnish technical assistance of the highest caliber. We receive federal and state funds to be passed on for use in local communities. This role of technical and financial assistance is essential to the success of the local units as they deliver the service.

This partnership of the State Department of Health and the county health departments should result in the protection and promotion of the health of all our people in the finest way.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 10-69. A 35 year old married, white, gravida 16, para 15, Rh+, had an expected delivery date of May 24, 1969. She was admitted to the hospital at 7:10 p.m. on May 6, 1969, by stretcher. It was felt the emergency section needed to be started in the interest of fetal distress.

The history the consultant obtained was that the patient had a backache all day and began profuse vaginal bleeding at home around 7 p.m., soaking two towels and passing clots. He examined her vaginally at 7:30 p.m. and found the cervix closed. Blood pressure was 138/80. Fetal heart tone was slow at 88 per minute. She was placed in shock position, 1000 cc G/W was started, a foley catheter was inserted, and she was prepared for immediate section. An abruptio placenta was diagnosed.

Under satisfactory anesthesia by an anesthesiologist, the abdomen was opened. The uterus was purplish in color. The visceroperitoneal reflection overlying the lower segment of the uterus was incised from the right ligament to the left, and the bladder flap was dissected off the lower uterine segment.

The infant was delivered at 8:12 p.m.; there was a heart beat present, a large amount of mucus was obtained from the trachea, and with positive pressure resuscitation, respirations were established. The placenta had almost completely separated. There was an estimated 500—800 cc of blood and clot behind the placenta.

The patient, by this time, was shocky. The incision in the uterus was closed in two layers, using a lock-stitch of number one chromic catgut. All free blood was aspirated. As the fascia was being closed, it was noted there was a marked amount of oozing throughout the length of the entire incision, both subcutaneously and in the fatty layer. The anesthesiologist noted extravasation of blood from around the IV.

It was felt the patient was developing hypofibrinogenemia, and one gram of fibrinogen was given IV, reconstituting it in 100 cc of sterile water. The uterus remained contracted with Ergotrate and Pitocin infusion. There continued to be some oozing from the uterus. She was given another gram of fibrinogen in the recovery room, while blood was being typed and cross matched. Blood pressure on completion of the procedure was 70/40.

She was taken to the recovery room in fair condition. The estimated blood loss was thought to be 1500 cc, and blood replacement was to be started when available in the recovery room. There was a delay in obtaining the patient's blood, since there was none available in the hospital. It was finally obtained at 10 p.m.; blood pressure had dropped to 58/30, pulse 84. She received aqua mephyton and atropine. The second unit of blood was started at 11:10 p.m.; however, her blood pressure remained 58/40, pulse 100. She became quite restless and actually difficult to control. At 11:45 p.m. blood pressure was 100/70. The third unit of blood was started at 11:50 p.m. She seemed to have some difficulty breathing. On completion of the third unit of blood, her blood pressure was 110/50, pulse 72 and regular. The IV was kept open with Ringer's Lactate. At 1:15 p.m., May 7, 1969, her blood pressure again dropped to 70/60; she was pale and restless with air hunger. Oxygen was started and she was digitalized. A medical consultant was called.

There was no vaginal bleeding; the uterus remained firm; the abdomen was soft. The internist saw the patient at 3 p.m. She appeared alert and oriented, but extremely weak, with evidence of peripheral shock. Her husband stated she had been "something of a heavy drinker," but otherwise had been generally in good health.

She was able to move all extremities. She had a marked tachycardia; blood pressure was 40/20. There had been no urinary output since surgery. Dextran was given, plus another unit of blood. Large doses of steroids were started. The prognosis was felt to be grave. The internist felt the most likely diagnosis was neurogenic shock or the microemboli from amniotic fluid embolus. Vasopressure substances weren't considered indicated. She continued to do poorly and expired at 8:25 p.m., May 7, 1969. An autopsy was requested; but it was denied.

The final diagnosis was pregnancy, uterine, delivered 37 weeks by emergency, low transverse cervical section—with delivery of a living male—abruptio

placenta with hypofibrinogenemia, resulting in possible amniotic fluid embolism, renal shutdown, and irreversible shock.

Comment

The Committee on Maternal Mortality considered this case to be an obstetrical preventable one. The first preventable factor, which has been mentioned several times in the deliberations of the Committee, was that this woman should have certainly been sterilized several pregnancies ago or, at least, counselled concerning effective methods of birth control.

A woman that is Gravida 16 is in an extremely high risk group. It was felt that the direct cause of this woman's death was the abruptio placentae, with excessive blood loss.

In an excellent review of this subject, Eamon De Valera, M.D., states that "the immediate reasons for death in cases of abruptio placentae are two: hemorrhage and shock, usually with coagulation defect, and renal failure. These deaths need not occur and can always be prevented by restoring effective circulation. This necessitates massive blood replacement."[1]

This was not carried out in this present case. The necessity for blood replacement can be accurately assessed and controlled by monitoring the central venous pressure. In De Valera's paper, Clinical Guides for the Administration of Blood are given. Fetal loss is high in abruptio placentae, but some salvage is possible, provided treatment is prompt and adequate.

The Committee felt that the operation of Cesarean Section was instituted before adequate blood replacement was available or given. Certainly, the institution of a central venous pressure monitoring device would have indicated that this woman had insufficient blood replacement. When one has the coagulation defects of afibrinogenemia, the patient has probably already lost a tremendous amount of blood. Certainly two units of fibrinogen would not be considered adequate for control of this type of bleeding.

It is interesting that in De Valera's study, prior to CVP monitoring, their average replacement was 3.3 units of blood; but when they instituted CVP monitoring, the average replacement was 10 units of blood. So it would appear from this present case, that there was pre- and postoperative bleeding that had not sufficiently been replaced to maintain an adequate replaced circulation to maintain vital function.

Reference

1. De Valera, Eamon: Abruptio Placenta. *Am. J. Obstet. & Gynec.* 100:599, 1968.

Brief Summary of Prescribing Information– 9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

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Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

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Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

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hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.



They all have two things in common: they have monilial vaginitis;



CANDEPTIN now gives you complete therapeutic flexibility.

It is the specific high potency antimonilial agent which provides superior effectiveness. And there is at least one dosage form to meet every patient's individual needs and/or preference.

CANDEPTIN—more advantages for your patients...

It's fast—prompt symptomatic relief of itching, burning, candidiasis discharge and malodor in 48-72 hours; usually cures completely in a single 14-day course of therapy.

It's safe—no side effects, clinical reports of irritation or sensitization have been extremely rare; exact dosage can be assured.[5,6]

It's convenient—easy to use in all forms, encourages patient acceptance and cooperation; therapy can be started in your office.

It's clinically proven—Candicidin is significantly more potent in vitro than nystatin,[1] and has a record of cure rates of 90% and more in pregnant and non-pregnant patients.[2,3,4] In two recent studies, both involving gravid and non-gravid patients, a 100% culture-confirmed cure rate was achieved with 14 days of therapy.[5,6]

CANDEPTIN (candicidin) Vaginal Tablets, Vaginal Ointment, and ... new VAGELETTES™

Now Vagelettes offer a unique new dosage form—candicidin ointment in a soft gelatin capsule—for virtually unlimited application. With Candeptin in three forms, your range of therapy has been extended to meet even those previously difficult-to-treat Candida cases.

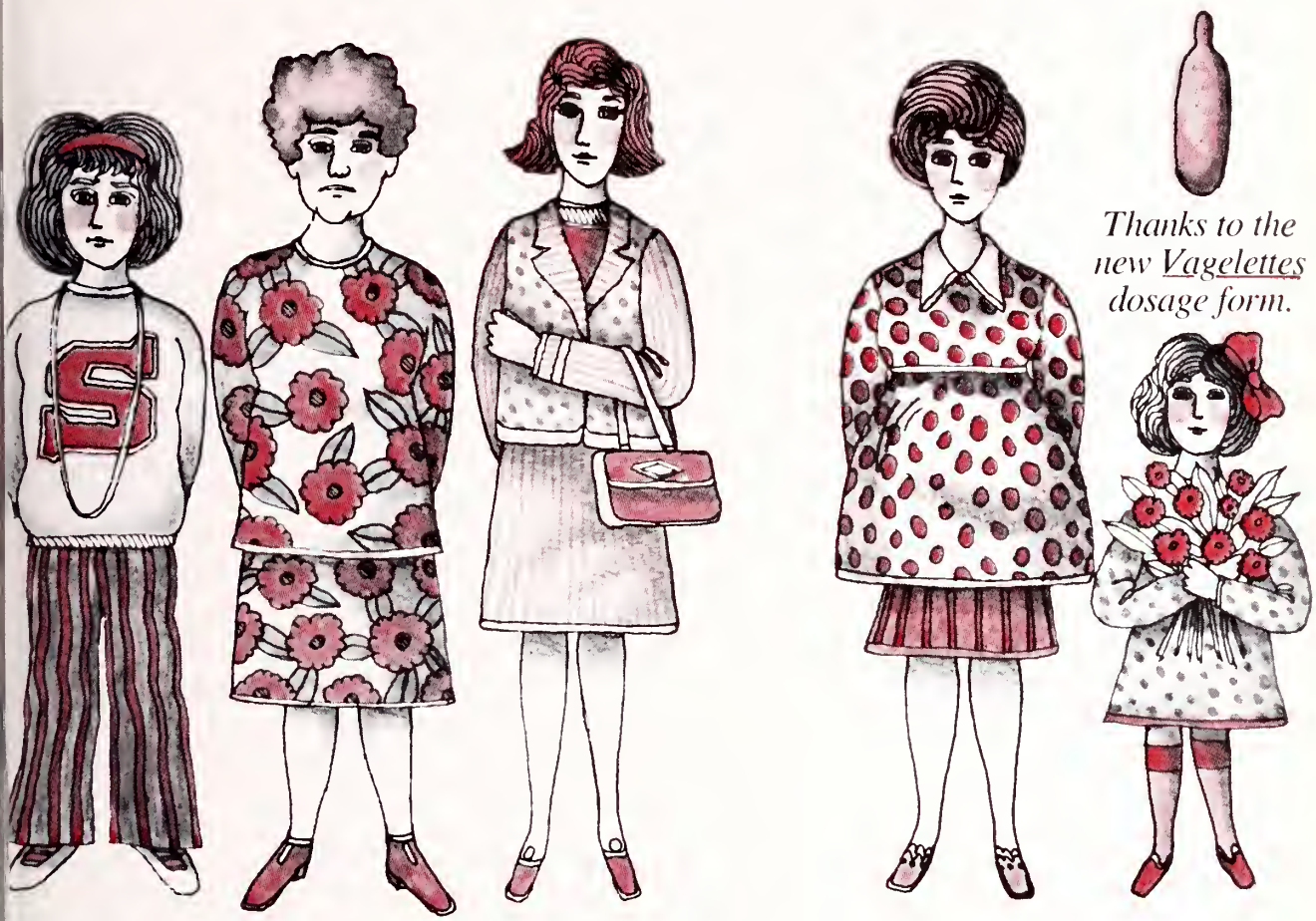
☐ For the young patient—cut off the tip of the narrow soft end of the Candeptin Vagelette and extrude contents through the intact hymen.

☐ For the gravid patient—easy manual insertion without the need for an applicator or inserter for intravaginal use.

☐ For the multiple needs of all your patients—topical application for labial involvement, intravaginal use to treat mucosal infestation.

References: 1. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 2. Olsen, J.R.: Journal-Lancet *85*:287 (July) 1965. 3. Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*:370 (Oct. 1) 1964. 4. Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966. 5. Giorlando, S.W.: to be published 1971. 6. Decker, A.: Case Reports on File, Medical Department, Julius Schmid.

they can now be cured with **Candeptin**. Even these two.



CANDEPTIN®
Candicidin Vaginal Tablets, Ointment, VAGELETTES™

Description: Candeptin (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. Candeptin Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. Candeptin Vagelettes contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.

Action: Candeptin Vaginal Ointment, Vaginal Tablets and Vagelettes possess anti-monilial activity.

Indications: Vaginitis due to *Candida albicans* and other candida species.

Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or Vagelette insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.

Adverse Reaction: Clinical reports of sensitization or temporary irritation with Candeptin Vaginal Ointment, Vaginal Tablets or Vagelettes have been extremely rare.

Dosage: One vaginal applicatorful of Candeptin Ointment or one Vaginal Tablet or one Vagelette is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Available Dosage Forms: Candeptin Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). Candeptin Vaginal Tablets are packaged in boxes of 28, in foil with inserter — enough for a full course of treatment. Candeptin Vagelettes are packaged in boxes of 14. (14-day regimen requires 2 boxes).
Store under refrigeration to insure full potency.
Federal law prohibits dispensing without prescription.

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when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.

Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.

For additional product information, see your Upjohn representative or consult the package circular.

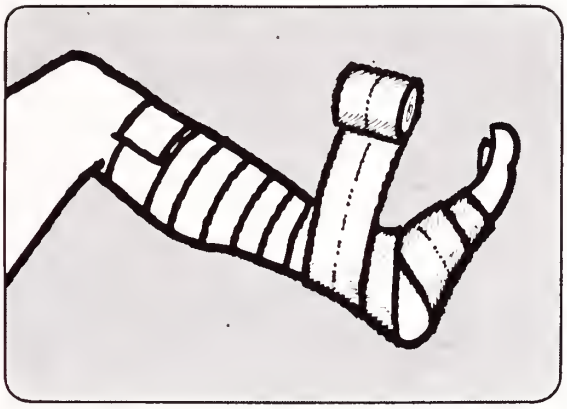
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This is a more comfortable and faster method of healing than Unna's Boot. Frequent changing of the dressing is eliminated. The newly forming granulation and epithelium are left undisturbed. It is the modern form of treatment.

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Or there is a potential for a severe allergic reaction with a penicillin-sensitive patient.

There is no guarantee of safety, even with Erythrocin.

Mild allergic reactions, abdominal discomfort and rare monilial overgrowth may occur. But serious reactions are extremely rare. And after 18 years, there are no known toxic effects on vital organs, bone, blood, nerves or teeth.

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See next page for brief summary, listing indicated organisms, precautions, etc.

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Brief Summary

Indications

Erythrocin is indicated against gram-positive cocci — staphylococci (most strains), pneumococci and streptococci (including enterococci). Active against other pathogens, such as *Corynebacterium, Hemophilus, Clostridium, Neisseria,* and *Treponema pallidum,* the agents causing trachoma and lymphogranuloma venereum and primary atypical pneumonia caused by *Mycoplasma pneumoniae* (Eaton agent). Establish susceptibility of pathogenic organism when practical. Maintain therapeutic levels for ten days in the treatment of streptococcal infections to help prevent rheumatic fever and glomerulonephritis. Also consider local measures or surgery whenever indicated.

Contraindications

Known hypersensitivity to erythromycin. I.M. preparation also contraindicated in patients hypersensitive to the "caine" type of local anesthetics.

Precautions, Side Effects

Occasionally abdominal discomfort, cramping, nausea or vomiting may occur; generally controlled by reduction of dosage. Mild allergic reactions, such as urticaria and other skin rashes, may occur. Serious allergic reactions have been extremely infrequent; if hypersensitivity is encountered consider appropriate countermeasures, e.g., epinephrine, steroids, etc., and withdraw drug. The rare possibility of overgrowth of nonsusceptible organisms should be kept in mind; if it occurs withdraw drug and institute appropriate treatment. Local venous discomfort, generally mild, may occur with I.V. administration. I.M. preparation is suitable for deep intramuscular administration only; restrict use in children with small muscle mass. A mild transient local discomfort sometimes occurs following rectal insertion of Erythrocin Suppositories; discontinue if significant discomfort persists.

Administration and Dosage

I. ORAL: In adults with mild to moderate infections caused by readily-susceptible organisms 1.0 Gm. daily; more severe infections or those caused by less susceptible organisms 2.0 Grams daily; unusually severe infections up to 4 or more Gm./day. Daily dose in children is 15 to 25 mg./lb./day depending upon severity of infection. Daily dose should be administered in divided doses at 4-to-6 hour intervals. Continue treatment for at least 48 hours after symptoms have subsided and temperature has returned to normal. In fulminating or life-threatening infections, a parenteral form of erythromycin is preferred.

II. PARENTERAL: Intravenous administration may be continuous or intermittent (6 to 8 hour intervals); 1 to 4 Gm. daily in adults; 15 to 25 mg./lb./day in children, depending upon severity of infection. Recommended I.M. dose is 100 mg. (2 ml.) for adults, 50 mg. (1 ml.) for children 30 lbs. or more and 1.4 to 1.8 mg./lb. in smaller children. Injections are usually given at 6 to 8 hour intervals; may be given at 4 to 6 hour intervals for severe infections.

III. RECTAL: Following therapeutic doses are recommended in children: to 20 lbs., 1-125 mg. suppository every 8 hours; 20 to 40 lbs., 1-125 mg. suppository every 6 hours.

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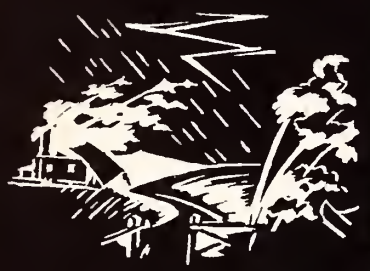
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3/26/68
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6/11/68
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Traumatic Arteriovenous Fistula of the Extremities†

MARTIN J. BELL, M.D.,* AND M. ATIK, M.D.**

Louisville, Kentucky

A review of the often-missed diagnosis of traumatic arteriovenous fistula of the extremities is presented. Early meticulous exploration of wounds in proximity of major vessels in order to prevent this complication is recommended.

In 1757, William Hunter first described a direct communication between artery and vein, and noted the bruit and thrill associated with it. A cure by arterial ligation was first accomplished in 1843 by Norris; and, in 1875, Nicoladoni first described and, in 1890, Branham emphasized slowing of the pulse rate on closure of a fistula. Cardiac enlargement, effects on blood pressure, local temperature changes, and abnormal bone growth were all described in the early part of this century. Holman contributed greatly to the understanding of the physiologic alterations associated with abnormal arteriovenous communications.[1]

Traumatic arteriovenous fistulas are a well recognized complication of vascular injury. Since the Korean War, immediate repair of arterial injuries has become a generally accepted practice, with resultant diminution in the incidence of this entity. A review of cases at the University of Louisville teaching hospitals during the past ten years indicates that still a number of traumatic potential A-V fistulae are missed initially, and that reemphasis of principles of management of vascular trauma is periodically necessary.

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Material

Between 1960-1970, 15 cases of traumatic A-V fistula of the extremities were seen at the University of Louisville affiliated hospitals. The diagnosis of major vascular damage immediately after injury was missed in all but two cases. It is interesting to note that in two patients, gunshot wounds were not explored, even though they were in the vicinity of major vessels, because the patients had good pulses, and no masses or bruit were present.

In two other cases, diagnosis of trauma to the vessels and presence of A-V fistula was not made initially because the arteriograms were considered normal. In one patient, the presence of A-V fistula of popliteal vessels was missed, even though the wound was explored. The patient subsequently developed a pulsatile mass with bruit. The A-V fistula was repaired following radiologic confirmation. In another patient, two years following repair of one A-V fistula, a second A-V fistula was found in the vicinity of the original repair and was noted to be intact.

The following case reports are presented to illustrate the currently accepted principles of management of traumatic A-V fistula.

Case I — The patient, an 18 year old white

male, was admitted after being injured in an automobile aeeident. A puneture wound was present on the medial aspeet of the left thigh. Minimal bleeding was present, sensation and motion of the extremity were intaet, and there was no pain in the leg. Distal pulses were present, but slightly diminished. A left femoral arteriogram was interpreted as normal.

The patient was observed for approximately three hours, during whieh time a small amount of bleeding persisted. At the end of this period, a further diminution of pulses and swelling of the thigh were noted. The patient, therefore, underwent an exploration of the femoral eanal. He was found to have a linear tear of the superfieial femoral artery and two ragged parallel linear laeerations of the femoral vein. The artery was repaired by end-to-end anastomosis, and the vein was ligated. The patient's postoperative eourse was uneventful.

Comments — This patient illustrates the wisdom of exploration if an injury oeeurs in an area where a major vessel is likely to be damaged. The presenee of distal pulses, the laek of symptoms and signs of isehemia, and normal arteriograms do not neeessarily rule out the presenee of major vaseular injury. An arteriovenous fistula would almost eertainly have oeeurred had this patient not had early vascular repair.

Case II — The patient, a 23 year old white male, entered the hospital one week after sustaining multiple gunshot wounds of the lower extremities. He was treated in a eommunity hospital with loeal wound eare. Several days later, his physieian noted the development of a thrill and bruit over the distal medial third of the left thigh.

Examination revealed a blood pressure of 150/70, pulse of 120/minute. There were multiple healing gunshot wounds of both thighs, one wound over the distal medial third of the left thigh. There was a firm hematoma and eeehymosis with a palpable thrill and a maehinery murmur in this area. The distal pulses were slightly diminished. There was no evidenee of eardiae failure.

A femoral arteriogram revealed a small aneurysm approximately 10 em above the left knee, with direet venous filling at that point



FIGURE 1A Femoral arteriogram—Case II—traumatic A-V fistula showing false aneurysm involving the left popliteal vessels.

(Figure 1A). Phonoeardiogram was obtained to doeument the eontinuous murmur. Blood gas studies obtained on the operating table revealed: arterialization of femoral vein of the involved extremity (Table I).

At operation, a 5 em aneurysm was found distal to the adduetor eanal. After proximal and distal eontrol of the popliteal artery, disseetion revealed a through and through wound of the popliteal artery, eommunieating direetly with the aneurysm, and a defeet in the opposing vein wall. The injured segment of artery, measuring 2 em, was reseeted, leaving the medial wall overlying the vein intaet. An end-to-end anastomosis of the artery and lateral vein repair

TABLE I

Blood Sample	pO_2 mm Hg.	% O_2 saturation
Lt. Femoral Artery	325	100
Lt. Femoral Vein (involved side)	82	100
Rt. Femoral Vein	35	35

Blood gases obtained in Case II, while patient breathing O_2 through endotracheal tube.

Note the higher pO_2 and O_2 saturation in the left compared to the right femoral vein due to femoral A-V fistula.

were accomplished (Figure 1B). The patient was discharged nine days after the operation, at which time his distal pulses, as well as his heart rate and his blood pressure, were normal, and he showed no difference in the blood pO_2 between his right and left femoral veins.

Comments — This patient initially showed no signs of abnormal arteriovenous communication. Fortunately, he was closely followed by his physician, who several days after injury noted evidence of A-V fistula. Arteriograms demonstrated the false aneurysm, and blood gas studies confirmed the presence of a fistula with arterialization of venous blood returning from the involved extremity. Had he been allowed to go untreated for long, he would have had further impairment of circulation in his leg, and the corrective operation would have had less chance of success.

Case III — This patient, a 51 year old white male, on December 2, 1969, sustained a 22 caliber gunshot wound to the upper anterior left thigh in the femoral area. He was treated with local wound care only and was discharged.

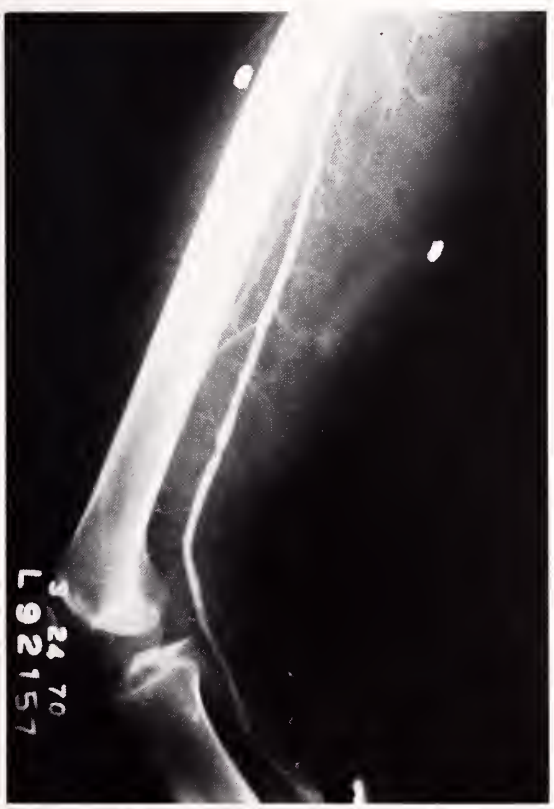


FIGURE 1B Femoral arteriogram—Case II—after repair of popliteal A-V fistula.

Shortly after discharge, he began to note pain in the area of the wound and calf, and swelling of the foot. The pain was accentuated with activity. He was admitted to our service on February 24, 1970, for these complaints. On examination, his blood pressure was 106/68 and his pulse was 82/minute. There was minimal swelling of the left lower extremity which was slightly cooler than the right. A thrill and bruit were present over the proximal femoral vessels. With compression of this area, the pulse slowed from 80 to 56 per minute. The distal pulses were full and equal in the opposite extremity.

Five days after admission, the patient had exploration of the femoral vessels, revealing a fistula between the deep femoral artery and superficial femoral vein. The segment of artery containing fistula was resected, and lateral repair of the vein and end-to-end anastomosis of the artery were performed.

Comments—In the ten week period intervening between injury and repair, this patient developed symptoms of arterial insufficiency of the involved extremity. This case illustrates again the need for early exploration of wounds in close proximity to major vessels.

Case IV — This 47 year old Negro male was admitted to the hospital three weeks after the onset of drainage from an old gunshot wound of the right flank. In 1951, the patient sustained multiple gunshot wounds of the abdomen with injuries of the colon, liver, and stomach. His eight month hospital course involved multiple surgical procedures for subphrenic abscess, duodeno-cutaneous, and colocutaneous fistulas. Toward the end of his hospitalization, he was found to have a right femoral arteriovenous fistula. A quadruple ligation of the involved vessel was recommended, but the patient refused, and was lost to follow-up for 19 years, during which time he was employed as a janitor.

On this admission, the patient appeared chronically ill; his pulse was 112/minute, and his blood pressure was 112/70. He had multiple abdominal surgical scars and there was purulent drainage from a one cm old wound in the right flank. The right femoral artery was twice normal caliber on palpation, and there was a marked bruit of the medial aspect of the



FIGURE 2A Femoral arteriogram of traumatic A-V fistula in Case IV, 19 years after injury. Note prompt visualization of the enlarged dilated veins superimposed over the femoral artery.

upper third of the thigh. Over this area a loud continuous murmur could be heard. There were no obvious wounds of this area. The distal pulses were markedly diminished. There was no evidence of heart failure and no edema or venous distention. Nicoladoni-Branham's sign was present with the pulse slowing to 88 on compression. Four hours after admission, the patient developed a pulse rate of 160/minute, and electrocardiogram showed a supraventricular tachycardia. The patient was digitalized with return of the pulse to 100/minute. The fistulous tract of the flank was drained and radiographic examination revealed it to be an enterocutaneous fistula. A femoral arteriogram was performed, showing an arteriovenous fistula with a dilated femoral artery and several large venous channels (Figure 2A). A phonocardiogram showed the configuration of the continuous murmur graphically.

A study of cardiac output showed a control value of 8.2 liters/minute, which was much higher than the normal predicted value of 4.5 liters/minute. With compression of fistula, it fell to 6.9 liters/minute. Upon release of compression, it rose to 7.4 liters/minute.

With the episode of arrhythmia and impending high output cardiac failure, repair of A-V fistula was considered to be urgent.

At operation, a fistulous communication was found between the dilated superficial femoral artery and a markedly enlarged femoral vein. Blood gases obtained showed marked arterilization of the involved femoral vein (Table II). The A-V communication was obliterated by multiple sutures from within the dilated artery. The patient had a rapid recovery with the return of distal pulses, disappearance of bruit, and absence of arterialization of his venous blood gases. Postoperation arteriogram showed the site of repair with adequate lumen, and the dilated segment of artery, proximal and distal to it (Figure 2B). A month later, he was operated upon for repair of his enterocutaneous fistula, and was subsequently discharged.



FIGURE 2B Femoral arteriogram—Case IV—following repair of traumatic A-V fistula of the right femoral vessels. Note the complete closure of fistula with normal lumen at the site of femoral artery repair, and the dilitation of the vessel proximal and distal to it due to A-V shunt of long duration.

TABLE II

Blood Sample	pO_2 mm Hg.	% O_2 saturation
Rt. Femoral Artery	270	100
Rt. Femoral Vein	130	100
Rt. Jugular Vein	48	83

Blood samples obtained in Case IV, while patient was breathing O_2 through endotracheal tube.

Note the marked increase in pO_2 and O_2 saturation in the femoral vein over that in the jugular vein due to admixture of arterial blood through the A-V fistula.

Comment — The very long symptom-free interval is not unusual in this injury. This patient manifested alterations in his cardiac physiology of major significance, such as arrhythmia and increased cardiac output due to a large A-V communication involving major vessels, as evidenced by marked arterialization of venous blood returning from the fistula. The fistula may have resulted from femoral puncture for blood sampling. In this case, in order to preserve the femoral vein and avoid tedious dissection and unnecessary blood loss, the involved adherent femoral artery and veins were not separated. The fistula was closed satisfactorily from within the markedly dilated artery without compromising arterial blood flow.

Discussion

Traumatic A-V fistulas result from a variety of causes. They are most frequently due to penetrating injuries related to gunshot and knife wounds. Needle punctures for a variety of diagnostic procedures, such as femoral puncture and liver biopsy, may result in A-V fistula. Ligation en masse of veins and arteries, as in renal, splenic, or thyroid pedicles and of uterine vessels during hysterectomy have caused A-V fistula. Fractures of long bones may also result in this complication. While extremities are the most common sites of A-V fistula, they may occur in the head and neck, and in the major body cavities.

The pathologic changes in the vessels involved in long standing fistula are significant. The veins are "arterialized" with thickened intimal, muscular, and connective tissue elements, increased elastosis, and vasa vasora. The arteries, on the other hand, exhibit a degenerative process that may be termed "venization"; focal necrosis of connective tissue, dystrophy of elastic fibers, and diminution of vasa vasora. Grossly, the arteries are dilated, tortuous, and thin walled.[2]

In the presence of an A-V fistula, blood may be visualized as flowing through two separate systems, one characterized by high pressure and peripheral resistance, and the other bypassing the capillary bed, acting as a parasitic short circuit, characterized by low blood pressure and low resistance, both supplied by the heart. Obeying the hydrodynamic law that fluids will seek the path of least resistance, the shunt allows for escape of blood from the high pressure to the low pressure system.

Upon creating a shunt in a laboratory animal, there is an immediate loss in the effective blood volume and a fall in the arterial pressure. Several compensatory mechanisms occur. The heart rate accelerates, the stroke volume increases, and cardiac output rises. There is an initial vasoconstriction and gradual expansion of the blood volume.

In patients studied, the cardiac output has been high if heart failure has not occurred. One case reported had a cardiac output of 23.9 liters/minute. There is increased cardiac work and oxygen consumption. Arterial-venous oxygen difference is decreased in the involved extremity because of arterialization of the venous blood returning from the fistula.[3]

Closure of the fistula reverses this sequence. At the outset, blood pressure rises and returns to normal gradually. The pulse rate slows and then returns to normal. There is vasodilitation initially, and then gradual decrease in blood volume. The cardiac output returns to normal.

Fistulae may enlarge, remain stationary, or close spontaneously. If the flow into the fistula increases, cardiac hypertrophy, dilitation, and eventual failure will occur. This can occur in months, or may take many years after injury.

These patients may be seen at variable times after injury, as illustrated by our cases. Changes noted in the involved extremities are varices, edema, and chronic indurative cellulitis. Gangrene of digits may occur. There is usually a palpable thrill, and a machinery murmur is ausculted over the fistula. The skin over the fistula is warmer, and distally cooler than the opposite extremity. Tachycardia, arrhythmias, cardiac enlargement and failure may be present. Pulses distal to the fistula may be diminished.

Slowing of the pulse rate upon compression of the fistula, Nicoladoni-Branham's sign, is usually demonstrated. If the fistula has occurred before epiphyseal closure of an involved extremity, increased limb length may be found.

Traumatic A-V fistula of small vessels which are not the major supply to a part may be treated by ligation. This treatment applied to major vessels will lead to loss of the part or symptoms of chronic ischemia. Closure of the fistula and reestablishment of normal arterial and venous flow must be the goal of treatment. Prolonged delay in repair is to be condemned. If the repair had not been done initially after injury, it should be done early in the course, after hematoma and induration have subsided sufficiently.[4] Presently, the procedure of choice is division of the fistula with lateral arterial repair, or arterial anastomosis, and occasionally arterial graft. Venous repair is advocated whenever possible to prevent the development of chronic venous stasis.[5]

Summary

This review of 15 cases of traumatic A-V fistula of the extremities emphasizes that these lesions are preventable. Too much reliance on the absence of characteristic physical findings and radiologic confirmation of a potential A-V fistula immediately following injury is not justified. The presence of a wound in proximity to a major vessel is indication enough for exploration of the vessel, regardless of the presence of distal pulses, normal arteriograms, and lack of symptoms, provided the patient's general condition will permit and facilities are available. If for some reason this aggressive approach is not adopted, the patient at least should be closely followed for signs and symptoms of A-V fistula, which later may become manifest. Early repair of these lesions are strongly recommended to avoid the complications of prolonged A-V shunt and the resultant peripheral ischemia and alterations in cardiovascular physiology.

References

1 Holman, Emile: *Abnormal arteriovenous communications*, second edition. Charles C. Thomas, Springfield, Ill., 1968.

2. Gomez, M., and Bernatz, P. E.: Arteriovenous fistulas: A review and 10 year experience. *Mayo Clinic Proceedings*, *45*:81, February, 1970.

3. Burials, K., Regan, T., Chisteusein, and Hellams, H.: Arteriovenous fistula: Hemodynamic effects of occlusion and exercise. *Amer. Heart J.*, *60*:495, October, 1960.

4. Beall, A., Harrington, O., Crawford, E. and Debalsey, M.: Surgical management of traumatic arteriovenous fistulas. *Amer. J. Surg.*, *106*:610, October, 1968.

5. Hughes, C. and Jahulse, E.: The surgery of traumatic arteriovenous fistulas and aneurysms. *Ann. Surg.*, *148*:790, November, 1958.

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Infectious Hepatitis in Logan County, Kentucky

A Probable Common Source Outbreak

Joel L. Nitzkin, M.D.,* and Mary H. Henry**

A large outbreak of infectious hepatitis was reported from Logan County in the fall of 1967. Prompt investigation traced the source to unchlorinated well water at a public eating place.

Over 80 reported outbreaks of infectious hepatitis have been attributed to contaminated food, milk, and water since 1895.[1, 2] The outbreak that occurred in Logan County, Kentucky, in September, 1967, is reported here as a probable common source outbreak of infectious hepatitis attributed to reconstituted soft drinks.

Background

Logan County (population 20,400) is in a rural, tobacco growing section of southwestern Kentucky. Russellville (population 5,900), the county seat, is the only community in the county with more than 1,500 residents. Four of the five neighboring Kentucky counties, Todd, Muhlenberg, Butler, and Simpson, are similar to Logan, with populations ranging from 9,600 to 27,800. Warren County, northeast of Logan, includes Bowling Green, a city of 28,400. Robertson County, Tennessee, immediately to the south, is more industrial and has little or no social or economic ties with its Kentucky neighbors.

A total of 23 cases of hepatitis were reported from the six Kentucky counties in 1966. Fifteen cases were reported in the first eight months of 1967. On September 12, 1967, the Logan County Health Department reported 16 more cases of hepatitis to the Kentucky State Department of Health. Investigation by local and state health department personnel began immediately.

Method of Study

Health Department investigators surveyed practicing physicians in the six Kentucky counties to detect unreported cases and to alert the physicians to the Health Department's interest in the prompt reporting of all patients suspected of having hepatitis. To check on the completeness of reporting, surveys were repeated in late September, and once more early in 1968. Similar surveys were conducted in Robertson County, Tennessee, but no cases were reported. Contact investigation and newspaper publicity resulted in the recognition of only one case not reported by a physician.

Study data were gathered by personal interview of physicians and patients and review of available hospital charts. For study purposes, the diagnosis of hepatitis was based upon the history of a dramatic change in urine color or liver function tests compatible with the diagnosis of hepatitis. No attempt was made to identify anicteric cases not clinically diagnosed by local physicians.

Initial investigation consisted of detailed epidemiologic study of the 41 cases that had been reported to the Logan County Health Department by noon, September 14. Policy decisions on the distribution of immune serum globulin, newspaper statements, and control-group investigations were based on analysis of these cases. Subsequent cases were investigated as they were reported over the next two months.

Results

By noon, September 14, 41 cases of hepatitis had been documented in the six Kentucky

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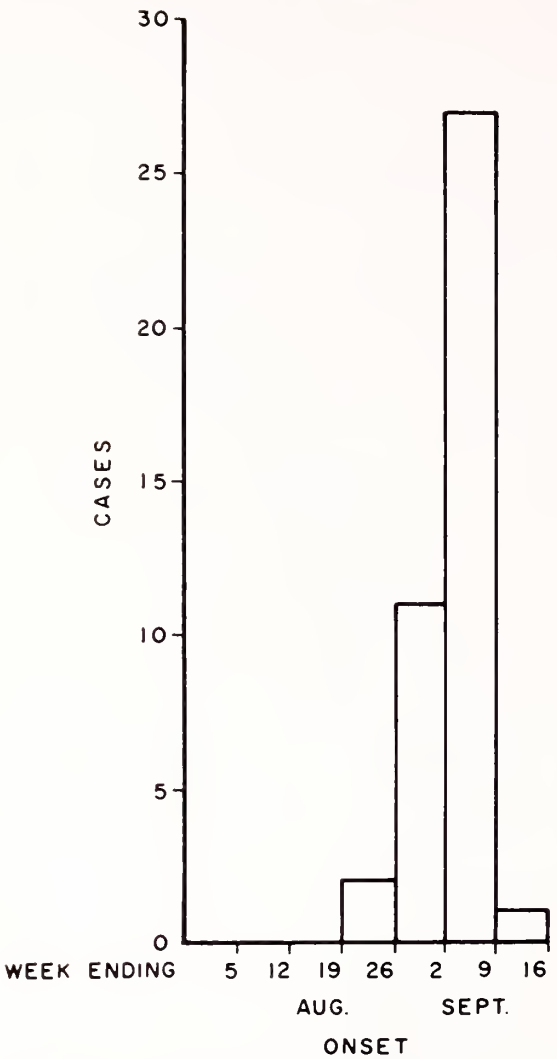


FIGURE 1 Forty-one hepatitis cases, by week of onset up to September 14, 1967, Logan County, Kentucky.

counties. Dates of onset ranged from August 23 to September 12 (Figure1). These were the first cases since June 1. The 39 white patients ranged in age from eight to 25 years, with a mean age of 17.3. Twenty-five (64.2%) were male, and 14 (35.8%) female. The two Negro patients were three and 35 years of age (Table I).

TABLE I

Age, Sex, and Race of the 41 Hepatitis Patients Identified in and around Logan County, Ky., by September 14, 1967.

AGE	WHITE		NEGRO		TOTAL
	Male	Female	Male	Female	
0 - 4	—	—	1	—	1
5 - 14	3	2	—	—	5
15 - 24	21	12	—	—	33
25 - 34	1	—	—	—	1
35 - 44	—	—	—	1	1
45+	—	—	—	—	—
TOTAL	25	14	1	1	41

Thirty-six of the 41 patients were residents of Logan County, and the other five lived within a few miles of the county line (Figure 2). Thirty-one of them lived in the Russellville-Lewisburg area of central and northwest Logan County. Lewisburg, a town of 512, had an attack rate of 13.7 per 1,000. Russellville, with a population of 5,900, had 12 cases, for an attack rate of 2.0 per 1,000. Auburn, population 1,000, had no known hepatitis.

One of the patients, a 35 year old Negro woman who lived in Simpson County, had received multiple blood transfusions while undergoing major gastrointestinal surgery in May, 1967. She was considered a probable case of serum hepatitis.

Ten (25.0%) of the other 40 patients had received one or more antibiotic injections and/or immunizations in the six months prior to onset of hepatitis. The injections had been given at different times and by different physicians. There was no evidence of illicit use of parenteral medication either among the patients or in

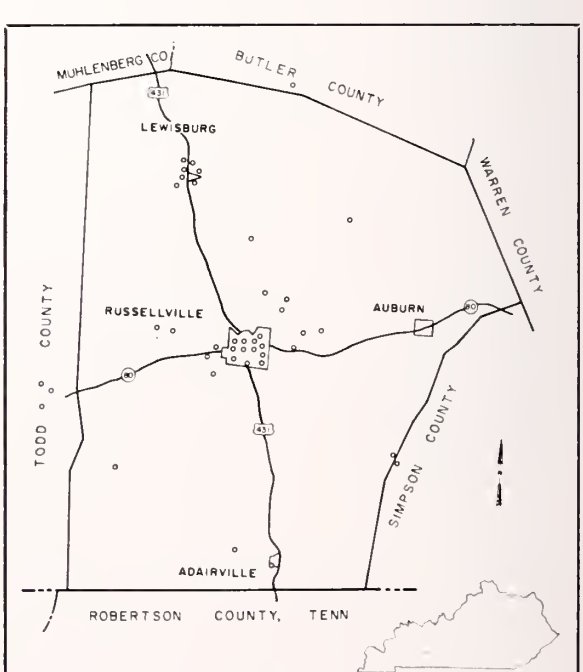


FIGURE 2 Places of residence of the 41 hepatitis patients identified as of September 14, 1967, Logan County, Kentucky.

TABLE II

Restaurant[a] Utilization during July and/or August, 1967, by the 41 Hepatitis Patients and 178 High Shool Students,[b] Logan County, Ky.

RESTAURANT	41 HEPATITIS PATIENTS		178 HIGH SCHOOL STUDENTS	
	No.	Percent	No.	Percent
1	19	46.4	88	49.4
2	6	14.6	8	4.5
3	13	31.7	59	33.1
4	23	56.1	93	52.2
5	6	14.6	34	19.1
6	11	26.8	20	11.2
7	28	68.3	92	51.6
8	15	36.6	50	28.1
9	14	34.2	52	29.2
10	36	87.8	78	43.8
11	10	24.4	44	24.7
12	9	21.9	80	44.9
13	8	19.5	45	25.3
14	2	4.8	33	18.5

[a]Fourteen public eating places in Logan County generally considered teenage hangouts.

[b]The junior and senior classes of Lewisburg and Auburn high schools.

the community at large. Lack of common exposure to needle and syringe seemed to rule out any common source of serum hepatitis.

All socio-economic groups were represented among the patients. They included one married couple and one pair of siblings. None of the patients were acquainted with more than five or six of the others and no common gathering had been attended by a majority of patients. These findings and the rapidly ascending epidemic curve (Figure 1) were interpreted as evidence against person-to-person spread as the major mode of transmission.

Raw shellfish, a frequently documented[3, 4] source of hepatitis, is rarely, if ever, eaten in Logan County. No public water supply common to a majority of cases could be identified, and no home-consumed food could be imagined as likely to explain the age and geographic distribution of cases.

Patient interviews did, however, identify a commercial eating place in Logan County frequented by 36 (87.8%) of the patients in July and/or August. This finding cast suspicion on "Restaurant 10" (Table II), a favorite hangout of Logan County teenagers.

Juniors and seniors at Lewisburg and Auburn high schools were interviewed at school on Friday morning, September 15, to compare the predominently teenage hepatitis group with hepatitis-free teenagers from the same general area. These interviews revealed that only 78 (43.8%) of the 178 students (Table II) had been to "Restaurant 10" in July and/or August. When the high schools were compared, 57.3 per cent of the Lewisburg students had patronized "Restaurant 10," in contrast to only 30.3 per cent of the Auburn students (Table III). Lewisburg had seven cases of hepatitis, Auburn had none.

TABLE III

Restaurant[a] Utilization during July and/or August, 1967, by Junior and Senior High School Students at Two Logan County, Ky., High Schools

RESTAURANT	LEWISBURG — 89 STUDENTS		AUBURN — 89 STUDENTS	
	No.	Percent	No.	Percent
1	54	60.6	34	38.2
2	3	3.4	5	5.6
3	37	41.6	22	24.7
4	53	59.5	40	44.9
5	12	13.5	22	24.7
6	12	13.5	8	9.0
7	51	57.3	41	46.1
8	34	38.2	16	18.0
9	17	19.1	35	39.3
10	51	57.3	27	30.3
11	20	22.4	24	27.0
12	13	14.6	67	75.3
13	38	42.7	7	7.9
14	31	34.8	3	3.4

[a]Fourteen public eating places in Logan County generally considered teenage hangouts.

TABLE IV

Age, Sex, and Race of the 90 Hepatitis Patients Identified in and around Logan County, Ky., by January 1, 1968

AGE	WHITE		NEGRO		TOTAL
	Male	Female	Male	Female	
0 - 4	1	3	1	—	5
5 - 14	5	4	—	—	9
15 - 24	40	24	—	—	64
25 - 34	5	5	—	—	10
35 - 44	1	—	—	1	2
45 +	—	—	—	—	—
TOTAL	52	36	1	1	90

A total of 96 cases of hepatitis were reported in the six-county area between September 12 and December 31, 1967. Of these, five were definitely not hepatitis and one was lost to follow-up. The remaining 90 constitute the final study population.

The age, race, sex, restaurant utilization, and date of onset of the 90 cases (Tables IV and V and Figure 3) follow the pattern established by the first 41 (Table I and II and Figure 2). Seventy-six (84.4%) of the 90 were residents of Logan County, and 64 (71.2%) were between 15 and 24 years of age. Seventy-one (89.9%) of the 79 patients with onset in August or September had been to the suspect restaurant in July and/or August.

Seventy-four (82.3%) of the 90 gave histories of exposure to the suspect common

TABLE V

Restaurant[a] Utilization during July and/or August by 79 Hepatitis Patients in and around Logan County, Ky., with Onset in August or September and 178 High School Students[b]

RESTAURANT	79 PATIENTS WITH ONSET IN AUGUST OR SEPTEMBER		178 HIGH SCHOOL STUDENTS	
	No.	Percent	No.	Percent
1	33	41.8	88	49.4
2	13	16.4	8	4.5
3	27	34.2	59	33.1
4	35	44.3	93	52.2
5	12	15.2	34	19.1
6	17	21.6	20	11.2
7	49	62.0	92	51.6
8	29	36.7	50	28.1
9	32	40.5	52	29.2
10	71	89.9	78	43.8
11	23	29.1	44	24.7
12	12	15.2	80	44.9
13	14	17.7	45	25.3
14	5	6.3	33	18.5

[a]Fourteen public eating places in Logan County generally considered teenage hangouts

[b]The junior and senior classes of Lewisburg and Auburn high schools

source restaurant, and had dates of onset between August 23 and October 3, a period of 42 days (Figure 3).

Five patients were close personal contacts of patients who had been exposed to the suspect common source. Dates of onset of these secondary cases ranged from 16 to 48 days after onset of the primary case. Only two of the five were household contacts, the rest being close social contacts of their respective primary cases. The absence of other secondary cases among household contacts may be at least partially attributable to the practice of administering immune serum globulin (0.01cc per pound of body weight) to all available household contacts and selected intimate personal contacts. The two secondary cases who were household contacts were among the very few such contacts who had not received immune serum globulin.

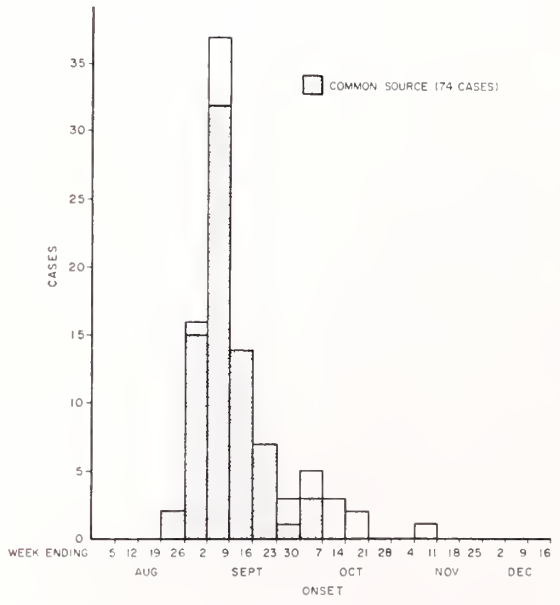


FIGURE 3 Ninety hepatitis cases, by week of onset and probable source, Logan County, Kentucky, August 1, 1967-January 1, 1968.

The remaining 11 patients were three teenagers, four preschool children, one adult contact of two of the children, a patient with serum hepatitis, and two women from an adjacent county. They probably represent expected endemic hepatitis in the area under study.

The Suspect Common Source

The suspect common source, "Restaurant 10," is the restaurant at a drive-in movie near Russellville. Soft drinks were the only food item common to all patients. They had been reconstituted on the premises with unchlorinated well water. The ice in the drinks was prepared from the same water.

There was no history of a hepatitis-like illness among the three restaurant employees during the summer or early fall. The kitchen was remarkably clean, and handwashing facilities were provided. The restrooms were on the opposite side of the restaurant building, with entrances only to the outside.

The old well which served the place is located in a small storeroom adjacent to the public rest rooms. Investigators were unable to determine the location of the septic tank or tile fields. The pump and storage tank of the well were in good condition, but no chlorinator was present. Three coliform counts showed no bacterial contamination, but flouroscein dye flushed down the toilet appeared in the well water in trace amounts ten days later.

Heavy contamination of the well water for a short period of time was postulated as the probable source of this epidemic. Since the

dates of onset of primary hepatitis cases attributable to the drive-in occurred in the period August 23 to October 3, with peak incidence in the second week in September, exposure is thought to have occurred within the first few weeks of August. Investigation failed to reveal any unusual climatic conditions, overusage of the sanitary facilities, breakdown in the plumbing, or mismanagement that might have resulted in contamination of the water early in August.

Comment

The data presented strongly suggest that soft drinks prepared from untreated well water at a public eating place in Logan County were the common source of 74 cases of infectious hepatitis. The appearance of fluoroscein dye in the well water ten days after it had been flushed down the toilet illustrates at least one mechanism by which the water may have become contaminated. The presence of fissured limestone in the geologic formations underlying the well raises the possibility of contamination by groundwater from a distant source.

The Logan County experience again points out the hazards of using untreated well water.

Epilogue

Shortly after completion of this epidemic investigation, a city waterline was extended to the drive-in movie, and the old well was disconnected.

Summary

Ninety cases of viral hepatitis were observed in a six-county area of Western Kentucky during September, October, and November, 1967. Epidemic investigation, begun September 12, consisted of filling out detailed questionnaires on all patients and two large control groups. Physicians in the area were polled several times during the study in an active search for new cases. Active surveillance continued until January 1, 1968.

Seventy-six of the 90 patients were residents of Logan County, and 64 were between 15 and 24 years of age. Investigation implicated soft drinks prepared from unchlorinated well water at a public eating place is Logan County as the probable common source of 74 cases. Five secondary cases and one case of serum hepatitis were also observed. The other ten cases probably represent expected endemic hepatitis in the area under study.

Acknowledgement

The authors are indebted to John A. Bryan, M.D., and Miss Frances H. Porcher, of the Epidemiology Program, CDC, for their assistance in the preparation of this manuscript.

References

1. Plowright, C. B.: On Epidemic of Jaundice in King's Lynn, 1895. *Brit. Med. J.* 1:1321, 1896.
2. *Common-Source Epidemics of Infectious Hepatitis* (A Summary of Incidents Reported in the Literature or Known to the National Communicable Disease Center), National Communicable Disease Center, Atlanta, Georgia, 30333.
3. Dougherty, W. J. and Altman, R.: Viral Hepatitis in New Jersey, 1960-61. *Amer. J. Med.* 32:704-716, 1962.
4. Ruddy, S. J. et al: An Epidemic of Clam-Associated Hepatitis. *J. Amer. Med. Assoc.* 208:649-655, 1969.

SPECIAL ARTICLES

Med-Ed Revisited

The Third KMA Conference on Medical Education convened January 23, 1971, at Park Mammoth, Kentucky. The basic topics to be considered during the two-day conference were: (1) "Future Development and Utilization of the Family Practitioner," (2) "The Role of the Medical Center in Practice Models for Experimentation in the Delivery of Medical Care," (3) "Medical School—Community Hospital Affiliations," and (4) "Medical Legislation and the Medical Schools."

As in the previous two sessions, representation from both the teaching and the practicing fields of medicine was approximately equal. The University of Louisville School of Medicine and the University of Kentucky College of Medicine each was represented by teams of 15 faculty members, and the KMA was represented by approximately 30 practitioners from varying geographic areas within the Commonwealth.

The topics, which were chosen by a Medical Education Subcommittee chaired by Frank R. Lemon, M.D., were most appropriate and engendered considerable discussion from all present.

The fields of "development of the family practitioner" and "medical legislation" seemed to have a considerable overlap, with the more recent passage of Kentucky legislation (requiring departments of family practice in each medical school) serving to bring the topics into immediate and practical focus!

The other two topics revolved around the increasing necessity for medical schools to join with both the communities in which they reside and the community hospitals therein, in order both to train students and to offer a proper degree of services to the taxpayers in return for their support.

The papers which follow have no need for further explanation; the authors were experts in their varying fields, and the note that was particularly gratifying to those of us on the Medical Education Committee was established by many of the discussants in the final day of the conference, when repeated wishes were voiced to see that this conference was held annually, rather than every two to three years. This goal, because of the amount of staff work and expense involved, seems unlikely to be achieved, but it certainly was pleasant to be appreciated!

The papers presented in this issue (beginning next page) center around the "Future Development and Utilization of the Family Practitioner," with presentations from an articulate family physician, Thornton E. Bryan, Jr., M.D., and further presentations from the academic viewpoint as presented by Douglas M. Haynes, M.D., and William S. Jordan, Jr., M.D., Deans, respectively, of the University of Louisville and University of Kentucky Medical Schools.

The remainder of the papers, embracing discussions of the other topics mentioned, will be presented in this *Journal* next month.

WALTER I. HUME, JR., M.D.

The Future Development and Utilization of the Family Practitioner

THORNTON E. BRYAN, JR., M.D.*

Cadiz, Kentucky

IT IS significant, I think, that someone other than I chose the title for this section of your program. It is reassuring to know that others recognize that the Family Physician, in fact, has a future.

If I sound a bit cynical, forgive me, but it has been hard for those of us who feel close to this Family Practice movement to reassure ourselves from time to time that some foot dragging has not been and is not going on in setting up teaching programs for this philosophy. If we seem impatient, again—forgive us, but the more one looks into the present method of delivering health care, the greater becomes the feeling of urgency to remodel it. We see this concept of Family Practice as an obvious route of improvement. As a matter of fact, so did the Millis Commission when they wrote: "The patient wants, and should have, someone of high competence and good judgment to take charge of the total situation, someone who can serve as coordinator of all the medical resources that can help to solve his problem. He wants a company president who will make proper use of the skills and knowledge of the more specialized member of the firm. He wants a quarterback who will diagnose the constantly changing situation, coordinate the whole team and call on each member for the particular contributions that he is best able to make to the team effort."

And the Folsom Commission report says: "Every individual should have a personal physician who is the central point for integration and continuity of all medical and medically related services to his patient. Such a physician will emphasize the practice of preventive medicine, through his own efforts and in partnership with the health and social resources of the community.

"The physician should be aware of the many and varied social, emotional, and environmental factors that influence the health of his patient and his patient's family. He will either render, or direct the patient to, whatever services best suit his needs. His concern will be for the patient as a whole, and his relationship with the patient must be a continuing one. In order to carry out his coordinating role, it is essential that all pertinent health information be channeled through him, regardless of what institution, agency, or individual renders the service. He will have knowledge of the access to all health resources of the community—social, preventive, diagnostic, therapeutic, and rehabilitative—and will mobilize them from the patient."

According to William R. Willard, M.D., Chairman of AMA's Council on Medical Education and a key figure in approval of the new certifying board, establishment of good family practice residency programs is the measure of success. Also vital, he says, is the development of a spirit of cooperation and goodwill among the various disciplines and elements of organized medicine. He sees the need to fashion a true specialist in family practice, a new kind of highly competent, comprehensive primary-care physician, in sufficient numbers to serve the American public, as the basic order of medicine's business today.

So—what about the Future Development of the Family Physician? I think he can only result from the continued development and improvement of the family physician of today, who developed from the general practicioner of yesterday. The development, I suspect, does and will parallel the development of the rest of our colleagues, the surgeon, the internist, etc.

What we really want to do, then, is to try to anticipate the lines along which the family physician of today will travel to become and to help produce the family physician of tomorrow. Logically, he can only be an improved and expanded extension of his modern counterpart—it is unrealistic to suppose otherwise. He will be the administrator of preventive

**Practicing physician; Third District Trustee, KMA*

maintenance, the shop foreman of the repair department, and the bookkeeper and coordinator of his patients' health and well being. He will be able to directly and competently care for 85-90 per cent of his patients' illnesses, and is the logical choice to direct and arrange for the remaining fraction. He will make greater use of his aides, paramedical people, and electronic devices just now coming to the front in medicine. He will be able to care for or direct the health care of more people, more competently, and more completely than any physician in history.

This new family physician represents a renewed emphasis in medicine. His numbers will swell by the beginning but spreading trend toward the redistribution of physicians according to the needs of society. He represents a return to the concept that the patient's total welfare is and should be the primary consideration. His approach is, and will continue to be, the much touted "holistic" one to health care. In most cases it will be expanded to include not only the effect of illness on the whole patient, but the effect of illness in a patient on society's structural unit, the family. That is why we call him a "family physician."

The current emphasis in medicine is on health care delivery, and this man is the most logical choice to do the job. The geometric procession of the population explosion adds impetus to this man, able to deliver health care on a broad base.

All this sounds good, but is it practical? If done, will it be accepted by the medical student and recent graduate? The answer to that is now legend. Where departments exist, the students love it; the residencies (several hundred now in existence) are all full and most have more applicants than places.

The young physician sees, in this approach, a true concern for people and their welfare. So why do we continue to argue with success? Especially here in Kentucky where every statistician's yardstick shows that we lag behind and that our need is greatest. When will we become enthusiastic about the obvious? Hopefully, our discussion and deliberation this afternoon and the speakers who follow will lead us to a better understanding and, I hope, a rededication to this concept.

The Future Development and Utilization of the Family Practitioner†

Douglas M. Haynes, M.D.*

Louisville, Kentucky

IN THE not too distant past, the popular image of the doctor was that of a kindly, unhurried, and sympathetic personality, personally concerned about all of the problems of the families under his care and available at all hours of the day or night to fulfill the roles of counsellor, comforter, and medical attendant. This ideal combination of the functions of physician and family friend was maintained wherever possible, in spite of the fact that large segments of the population had no such person to turn to. The old family doctor worked in an era when medical education was poorly organized and rudimentary, and a doctor could perform his duties acceptably with a modest scientific background and a minimum of sophistication.

With the rapid development in the 20th Century of medicine into a highly technical area of knowledge, the age of the specialist arrived. The family practitioner found himself pushed to one side, relegated to the role of triage officer or referral center for a battery of specialists. The extension of medical care to greater and greater segments of the population made it more and more difficult for the family physician to maintain the same kind of personal contact with his patients that had been possible in an earlier age.

At the same time, the specialist developed an image of personal glamour that appealed to students of medicine more strongly than the

†*This paper was presented by Roderick MacDonald, Jr., M.D., Professor and Associate Dean for Clinical Affairs, University of Louisville School of Medicine, in the absence of Doctor Haynes.*

**Dean, University of Louisville School of Medicine*

homespun picture of the family practitioner. The family doctor continued to be overworked, but did not have quite the same psychic rewards from families he tended as before; at the same time, the public missed his personal touch amid the impersonal ministrations of the new superspecialized system.

The establishment of the American Academy of General Practice did a great deal to reinstate the family practitioner in his proper place as medical attendant for the entire family. Standards of education rose, and the family practitioner became once more an important element in the medical care picture. This upgrading of standards has continued and has culminated in the creation of the American Board of Family Practice, which has the aim of providing the family practitioner with the same credentials as any other specialist, thus elevating the field of family practice to the level of a specialty in its own right.

In spite of the progress being made in the status of the family practitioner, the educational programs for producing such have not been developed as rapidly as might have been desirable. Medical schools have not been clear as to the special field of knowledge represented by family practice, as opposed to the relatively well-defined disciplines of the medical specialists. The enthusiasm of both local and national legislators for the establishment of separate departments of family practice in medical schools has not always been shared by the faculty of the medical schools themselves.

Perhaps this is a matter of definition of the field of family practice. Certainly, it is possible to design appropriate residency programs involving contact with the pertinent medical disciplines and to set standards which would qualify an individual to practice family medicine with a high degree of sophistication. Medical educators, however, are dubious about the extent to which separate departments in medical schools would serve to interest medical students in bypassing the glamorous specialties for family practice.

Our current national dilemma, demanding the provision of health services for all the people, would appear to call for the development of large numbers of family practitioners, but it will be many years before we could expect a large enough number of physicians to be interested in this field of practice to make more than a token impression on the entire picture.

In the meantime, the medical schools face a real challenge in developing appropriate programs in both undergraduate and graduate levels to produce sophisticated, well-rounded physicians whose major interests lie in the provision of top quality medical care to families in a comprehensive and broad manner. Most of the medical problems confronting the average family do not require the specialized services of individuals highly expert in narrowly circumscribed fields of medical specialization.

The family practitioner should not be allowed to disappear from the scene; he should be recognized as the equal partner of physicians in any field of medical practice. The problem at hand is to develop academically responsible models for his education that will prepare the family practitioner for the task at hand, without infringing on the proper sphere of activity of other kinds of specialists.

This, then, is a problem of educational planning. As in other areas of education, it will be necessary to define exactly what our educational aims and objectives are; we will then be in a position to design programs to accomplish these objectives. This type of planning can perhaps best be done within the framework of the regular medical educational system; but it must be accomplished by individuals who are competent, not only in the practicalities of family practice, but also in the area of education.

Our first step in meeting the needs of family practice from the point of view of development of competent practitioners must be to identify and develop educators who are also specialists in this new academic field. Regardless of the pressures imposed on the educational system by the urgency of the need, we cannot afford to initiate amateurish and hastily conceived programs; a department of family practice must be just as carefully planned and structured as any other department of the medical school.

The key man in any such department will be its chairman; his will be the task of structuring the curriculum, convincing his colleagues of the validity of his program, and inspiring his faculty and students to make their contribution to the total effort of the medical

school a vital and significant one. We are, in fact, calling for a pioneer breed of medical educator to take the first steps toward establishing family practice as an independent academic discipline. The task will not be easy; prejudices will have to be overcome, new trails will have to be blazed, and academic excellence will have to be combined with effective salesmanship. Though the issue may still be in doubt, the time is ripe for the effort to be made. The next few years should be an exciting time.

The Future Development and Utilization of the Family Practitioner

William S. Jordan, Jr., M.D.*

Lexington, Kentucky

THE University of Kentucky College of Medicine has always provided its undergraduate students with an educational program basic to the practice of family medicine or any of the medical or surgical specialties. Although the curriculum now permits a wide choice of electives, further differentiation and specialty training still occur during the postgraduate years in internship and residency programs, most of which are not the responsibility of the parent university.

Despite the failure of the initial attempt of University Hospital to sustain a general practice residency, and the lack of any true model of family practice in which students "provide care to all patients regardless of sex or age,"[1] many U.K. graduates have been attracted to general practice. The University of Kentucky's College of Medicine has graduated 399 M.D.'s in its first seven classes.

Although most of these physicians are still in training or in the Armed Forces, numbers equivalent to the first graduating class are now in practice in Kentucky. Of the 35 in private practice, 30 (86%) are in general practice, and 11 are located in Eastern Kentucky. It is to be expected that the percentage of those in specialties will increase as the longer training programs are completed; nevertheless, the internship choices of our recent graduates and present seniors indicate that many are headed for family medicine. The important questions for consideration at this conference are: "What is family medicine?" and "What should be the education of the physician who proposes to practice in the future?"

In accordance with the mandate of the Legislature of the Commonwealth, the University of Kentucky will create a Department of Family Practice, and will activate its programs as soon as funds for faculty and facilities are made available. A committee, chaired by Frank Lemon, M.D., is hard at work developing plans for the department and collecting information on candidates to serve as its chairman. The most important responsibility of this committee, in collaboration with the Committee on Educational Policies and Curriculum, chaired by Myron Sandifer, M.D., is to answer the two questions just posed, and it must answer them with reference to the overall goal of the University's Medical Center.

If this goal is the education of health professionals to provide comprehensive health services to all citizens, where does the family physician fit? If by comprehensive health services is meant a complete medical system which includes preventive care, primary care, and easy access to a complete range of specialized services, what services are best provided by the family physician? Will the education of more family physicians solve at least some of the problems of our present health care delivery system?

Here are some of the current complaints in regard to the provision of medical services:

1. I cannot find a family doctor.
2. My doctor won't make house calls.
3. There are fewer and fewer general practitioners and more and more specialists.
4. If 75 per cent of patients seen in the family doctor's office have problems which he can manage by reason of his initial training

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and continuing education, why aren't more "generalists" produced by medical schools?

5. If a member of my family gets sick, the only place I can go is to the emergency room of a hospital.

6. I have to make appointments weeks ahead, and still have to wait a long time in the doctor's office.

7. Medical care is too expensive.

8. Each specialist I see refers me to another specialist, and no one tells me what's wrong with me.

9. Even the specialists are specialized. Fewer and fewer general pediatricians and general internists are entering practice, and subspecialists do not take the general care problem seriously.

10. For too long now, medical schools have been spending a disproportionate amount of energy and funds on research and ignoring people's needs.

11. The medical care system was never designed to give equal care to all. It grew as a two-class system: medicine for those who could afford to pay, and another kind of medicine—often linked to large municipal hospitals—for those who could not pay. Access to good medical care is a right; the system must be changed so as to provide it for all citizens.

Will a Medical Center face these problems by focusing on a Department of Family Practice? To emphasize the challenge faced by proponents of Family Medicine, here is what one medical school Dean has to say about it:[2]

> "One almost has the feeling that certain medical educators would prefer to return to an earlier time uncomplicated by scientific and technical advance rather than face the reality of today's problems. For the facts are, that the care of the sick will become more, rather than less, complicated, specialists will increase in number because they are needed, scientific advance will continue, and no one will possess all of the knowledge and skill to provide the best preventive and curative care for a single patient, much less a family. Our dilemma is that the system has broken down, and the suggested solution is the recreation of a physician invented in colonial America. This is rather like saying that the trouble with the aerospace industry is that there are too many systems engineers and too few journeymen and apprentices.
>
> "It is fruitless for medical schools to experiment with curriculum changes designed to produce general physicians, unless they are willing to identify and study objectively the faults of the system of the medical care which we now provide. Further, they cannot hope to develop a rational system of medical education until some models are created that demonstrate how care may be provided in the future."

Some who champion the education of greater numbers of family physicians suggest that this will solve the problem of rural medical care. The education of more physicians, whatever the nature of their training, will not alone solve the problem of maldistribution of health professionals, whether in rural or inner-city areas. The lack of modern facilities and the enormity of the social and economic problems of such areas require other solutions to promote effective and efficient use of existing manpower.

Here is what the Association of American Medical Colleges had to say when testifying on the bill to authorize grants for establishing Departments of Family Practice:[3]

> "The advance of medical science and technology, the necessary expansion of specialization in medicine to assure effective clinical application of these advances, rising public expectation that their health needs will be more adequately met, and the growing inaccessibility of health services has made it abundantly clear that there are major deficiencies in the nation's present arrangements for the provision of medical care. This set of circumstances has emphasized for some time that a more direct confrontation with the problems of meeting society's health needs constitutes perhaps the central challenge before medical education today.
>
> "In general, it seems clear that a major national need is for the better provision of primary, personal, and comprehensive medical care. Various terms are utilized to describe this need—family practice, general practice, personal medicine, primary physician, generalist, etc.
>
> "Because of this confusion in terminology, it is more useful to think of the functions

which should be performed in the optimum provision of health care to patients:

1. Assessment of their total needs before they are categorized by specialty.

2. Elaboration of a plan for meeting those needs in order of their importance.

3. Determination of who shall meet the defined needs—physicians, general or specialist, non-physician members of the health team, or social agencies.

4. Follow-up to see that needs are met.

5. All must be done in a continuous, coordinated, and comprehensive manner.

6. Attention at each step must be given to the personal, social, and family dimensions of the patient's problem.

7. Health maintenance and prevention are as important as cure and rehabilitation.

"The achievement of a pattern of medical care which provides for the full and competent performance of these functions is dependent upon changes in not only the content and scope of the educational experience of the M.D., but also upon considerable change in the structure and process of delivery of health services.

"The concentration of support only on developing departments and programs in Family Practice such as proposed in S.3418 would, in the view of the Association, not provide the broadest opportunities to achieve the function of providing primary care is by no means confined to general practitioners.

"It seems evident that the education of internists, obstetricians, and pediatricians, as well as general practitioners and other specialists, should have sustained exposure in their educational experience to the needs, functions, and practices involved in providing sound comprehensive and prevention-oriented medical care.

"The urgent and fundamental need is for broad flexible support of the whole process of innovation and new developments in medical education aimed at increasing its relevance to the problems, conditions, and needs of developing a system of medical care services characterized by comprehensiveness, continuity, competence, humaneness, and family orientation."

The AAMC did not deal with all of the complaints mentioned earlier. If knowing the total constellation of family, community, and environment is important in health and disease, will specialists other than the family physician have the initiative to seek such knowledge? Is the concept that *some one* has to take on the whole health care problem of the individual and his family valid? What are the answers?

The University of Kentucky College of Medicine proposes to join with all other units of the Medical Center in expanding research in the delivery of health care. No clear pattern for the future of medical practice has emerged, and it is desirable that there be a diversity of approaches to the provision of health services and an opportunity for critical evaluation of these approaches. A Department of Family Practice must consider the roles of physician assistants, nurse practitioners, clinical pharmacists, and many others, as it seeks to develop an efficient, economical, and compassionate system for providing continuing care. The Department based in Lexington will seek to broaden its educational base by affiliating with satellite programs at Harlan, Madisonville, and elsewhere. It possibly could become a key part of a federally supported Health Maintenance Organization designed to coordinate medical care for the indigent. Many other options need to be considered.

To emphasize further the challenge facing those planning Departments of Family Practice at Kentucky's two medical schools, I offer one more quotation:[4]

> "Medical schools recruit from the top 20 per cent of the country's students. Such intelligent men and women know when they are spreading themselves too thin. They are unhappy when they are not doing all that might be done for their patients, and they seek means to correct it. One reaction is to abandon general practice. Nationally, the trend is clear; increasing numbers of physicians are seeking the personal security and satisfaction of specilization. They look for a body of knowledge they can contain and can be highly skillful in applying. To be able to deliver what he knows is the best, the

doctor today is forced to limit the breadth of his practice—to specialize. The trend has been fired by the demand of the American public for the ultimate in medical care. "The general practitioner, particularly the soloist, is not replenishing his ranks. He is overworked and overtaxed beyond his mental and physical capabilities; his plight has become recognized, and his numbers have diminished. This appears to me a —natural physiologic—or psychologic—or sociologic—consequence of advance in medicine. I see no reason to fight this natural trend toward specialization."

It is my understanding that family medicine has joined the trend toward specialization. While there are no disciplines peculiar to family practice, it is proposed that the integrated education of the family physician in medicine, pediatrics, psychiatry, community medicine, normal obstetrics, and emergency care will produce a specialist who can deliver a certain type of medical care better than anyone else.

Whatever the scope of the departments which emerge, whatever the role defined for the family physician, two things closely interrelated are essential if the family doctor is not to continue to disappear:

1. The career of the family physician must offer adequate intellectual rewards, and his practice must be emotionally and physically endurable.

 (a) He must be both competent and confident in his role.

 (b) He should not spend his time doing what someone else with less lengthy and less expensive education can do just as well.

2. The family physician must have the esteem of his patients and of his peers so that his own self-esteem will be assured.

We are grateful to our colleagues at the Medical Center and to the physicians throughout the State who have joined in our planning efforts. The members of the U.K. faculty who are here look forward to learning from you, which, after all, is the purpose of this meeting.

References

1. Burket, G. E., Jr.: *Journal of Medical Education,* 45: 982, 1970.

2. Ebert, Robert H.: *Medical Education and the University, in Views of Medical Education and Medical Care.* John H. Knowles, ed., Harvard Univeristy Press, Cambridge, Mass., 1968, p. 32.

3. A.A.M.C. Statement on S.3418, presented before the Health Subcommittee of the Senate Committee on Labor and Public Welfare, July 9, 1970.

4. Code, Charles F.: Determinants of Medical Care—A Plan for the Future. *New England Journal of Medicine,* 283: 679, 1970.



KMA Proposed Preliminary Legislative Goals for 1972

The following are the proposed preliminary legislative goals, approved by the Executive Committee of the Board of Trustees, which the KMA Committee on Legislative Activities has sent to all the major gubernatorial candidates in the May 25, 1971, primary. These proposals are also available to any other candidates who request them from KMA.

1. Medicaid Program—It would be the recommendation of the Kentucky Medical Association that the fiscal intermediary for the Medicaid Program in Kentucky be Kentucky Physicians Mutual, Incorporated. The reasons have been elaborated upon many times, and we stand ready to discuss these reasons again to help insure the rights of the Medicaid recipients.

2. Quality Health Care—The potential of quality health care for all our citizens can never be reached with the practice of permissive quackery. Billions of dollars and lack of proper treatment are the penalty of quackery for some citizens of this Commonwealth. Chiropractic and all types of quackery should be banned and that law should be enforced.

3. Reorganization of the State Board of Health—KMA testified at the 1969 Legislative Research Commission hearings on the proposed reorganization of the State Board of Health; and the stand of KMA, which was recorded and printed by the Legislative Research Commission staff, is the same as it was then.

4. Medical Licensure—It is the feeling of KMA that the Division of Licensure should be removed from the jurisdiction of the State Board of Health if the Board is enlarged as recommended in the proposal discussed in Item 3. We do not feel that any State Board of Health, possibly composed of a number of members who are not doctors of medicine, should be judging the merits of an individual to practice medicine in the Commonwealth of Kentucky.

5. Department of Environmental Quality—There has been considerable discussion concerning a department in state government which would involve itself in various problems in the environment. The Kentucky Medical Association would favor an agency of this nature, providing it falls under the jurisdiction of the Kentucky Department of Health.

6. Professional Liability Insurance—From routine blood transfusions to emergency surgery, there are many matters creating serious liability insurance problems which affect the cost and quality of medical care. We hope to submit some helpful proposals on this subject.

7. Coordination of Efforts in the Field of Health Care—It is a recommendation of KMA that in the future there be a less fragmented effort in the field of health at the state level. It is our intention that more effort should be given to coordinating the efforts of the State Department of Health with those of the medical profession and allied health groups. In the overall structure of the KMA legislative program will be specific recommendations as to how we feel we can best overcome fragmented efforts in this vitally important field.

8. Rural Kentucky Medical Scholarship Fund—KMA feels that it is imperative that the money authorized by the Commonwealth of

Kentucky to the Rural Kentucky Medical Scholarship Fund be continued. As we make an intensified effort to provide additional physicians for rural areas in Kentucky, an increase in these funds would be essential.

9. Physician's Assistant—One of the most important changes which may be forthcoming in the field of health care is a new career, the physician's assistant. We feel it is necessary that proper legislation be put into the statute books of Kentucky to permit the physician full utilization of the physician's assistant under his supervision.

10. Peer Review—It is generally conceded, throughout the medical profession in the United States, that Kentucky Medical Association peer review activities are among the best in the nation, if not the best. Since there has been so much discussion, particularly among lay groups regarding peer review, we feel very strongly that this function should remain primarily a function of the medical profession. If government assumes a review function within the field of medicine, it is our very strong feeling that it will tend to weaken the practice of medicine and will tend to further fragment activities in this field. It is also the belief that reports and records of medical peer review and utilization review committees should be confidential and not admissible in a judicial proceeding.

11. Summary—When the 1972 Legislative Program of KMA is finalized, it will be made available to anyone interested, so that they will be able to review the various programs which the medical profession in Kentucky feels are vitally necessary for the continuing improvement of health care within the Commonwealth of Kentucky.

EDITORIALS

Time for Change

In October, 1970, The Carnegie Commission on Higher Education published their report and recommendations concerning policies for medical and dental education.* This is probably the first comprehensive document on the subject since the Flexner report of 1910, which initiated the high standards that have been maintained ever since. At the end of World War II, there were 79 medical schools in the United States, all of A grade standard. We now have 103 schools, all fully accredited. The present report is made on the premise that after 60 years, it is time to survey the whole business of medical-dental education and, in the light of today's problems, project needed innovations.

"The most serious shortages of professional personnel in any major occupation group in the United States are in the health services." A reasonable objective would be to expand the number of available billets for medical students during this decade by 50 per cent, and for dental students, by 20 per cent. Roger Egeberg, M.D., of HEW, is quoted as stating that today we need 50,000 more physicians, a couple hundred thousand more nurses, and almost 150,000 more technicians. With this estimate the Commission agrees.

In order to achieve this goal as soon as possible, it is recommended that medical schools now in operation expand their capacity for more students as rapidly as possible, by physical enlargement of their facilities, if necessary. It is further suggested that all schools admit a minimum of 100 or more freshmen each year, and that present two year schools prepare for a four year schedule, as soon as possible. Going to a year-round schedule, with admission of two classes each year, could appreciably increase the total output of physicans and dentists. It is recommended that nine new medical schools, in addition to those now being constructed or planned, should be established in the next five years.

Shortening the period required from the completion of high school to when the candidate may begin his professional career is another effective way to increase the number of physicians. It is not suggested that the basic preparation—four years in college—should be changed. A broad and firm pre-medical education should be maintained, and the candidate begin his medical years with a scholarly background in the Arts, Science, and the Humanities.

The traditional year of internship should be deleted from the calender—its basic advantages can well be gained by clinical clerkship during the junior and senior years. Most schools have recently been less insistent on rotating internships, anyway. The period of residency in Medicine, Pediatrics, and General Surgery, if efficiently programmed, could well be accomplished in three years beyond graduation—more years for preparation in the various subspecialties will admittedly be needed.

While, in recent years, our number of physicians has been greatly increased by foreign graduates coming into this country, that cannot be regarded as the best way to overcome our physician shortage. In 1967, about 15 per cent of all physicians were graduates of foreign schools—46,000 altogether, of whom 19,000 were in private practice, 9,000 were on medical staffs in hospitals, and 14,000 were working as house officers; many of these graduates are from schools whose quality of medical education is inferior to the best training available in this country.

This is regarded as an unsatisfactory solution to our physician shortage and is often resented abroad as a "brain drain" from countries less favored with good medical care than

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the United States. Some South American countries, at least, have come to discourage their medical graduates from coming here on that very account. They come for further training, but too often prefer to gain U.S. citizenship and remain here. Our medical schools are so short on places for their applicants that they are able to accept only slightly more than 50 per cent of those who apply—as a result about 11 per cent of our own students attend and graduate from foreign medical schools.

There is a great disparity of women studying medicine. Increasing this percentage from the six to eight per cent, which has been maintained for the last two generations, is desirable for many reasons, but is less desirable for the fact that married women in any of the professions are less constant in the pursuit of that profession than men, for very obvious and commendable reasons. Among female medical school graduates between 1931 and 1956, 45 per cent were working full time, or even part time in 1964.

There has been, and still is, a very honest and continuous effort to increase the percentage of medical students from our minority groups, especially blacks. This has so far been disappointing, for a great many reasons not very well understood. It is not principally financial, because the same provisions for monetary aid for those needing it are equally available. Yet, while the black population of this country is variously quoted as 11 to 15 per cent, only two per cent of American physicians, and in 1969, only 2.8 per cent of medical candidates, were black.

The overall recommendations of the Commission are like this. There were about 10,800 students who entered medical school in 1970-71. This number should be increased to about 15,300 by 1976, and 16,400 by 1978—an increase of about 50 per cent in eight years. That is a big order. To do this, it is suggested that the existing medical schools shift from four to three year programs from the B.A. to M.D. degree. All schools should increase their enrollment, by physical expansion, if necessary, to the greatest number possible. Nine new medical schools should be able to increase the number by up to 1,350 new places. It is further suggested that all the present six schools of Osteopathy be converted to schools of Medicine, as soon as is feasible.

The above is only a very brief account of that portion of the report dealing with the physician and dentist shortages and suggestions as to how it may be helped. The whole subject of medical manpower and the necessity of providing better medical care to all our people is dealt with in a very realistic manner, and well it deserves our attention. In some respects, it seems idealistic and very expansive in its scope. The Dean of the University of Louisville School of Medicine, Douglas M. Haynes, M.D., in an address to the Downtown Rotary Club on March 25th, commented upon the problems confronting the individual medical schools and their program in adapting to the new proposals in medical education and health-care delivery. They are many and diverse, and are complicated by the impending threat of extensions in Federal control. We must consider and meet them in the best manner possible.

We Kentuckians can find two very favorable and complimentary notes in this report. First, of the 10,800 freshmen medical students entering this year, our two schools took 216, or two per cent. Our percentage of U.S. population is about 1.5 per cent. At least we are presently carrying our share of medical education. If they keep raising the ante, we may have to pretty soon bestir ourselves, but for the present, we are creditors, not debtors. Second, this report has a neat tabulation of all states entitled "State expenditures for regular operating of medical schools per $100,000 personal income," and we may very well congratulate ourselves. These expenditures are tabulated from "less than $200" to "more than $500." Kentucky is one of the six states in the highest bracket, and the third highest at that. These six states with each expenditure are: Utah, $1,242; Vermont, $1,118; Kentucky, $731; Iowa, $718; West Virginia, $559; Louisiana, $525. At least for once we aren't the forty-third state!

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

Outstanding Scientific Program To Feature Many Guest Speakers At KMA Annual Meeting, September 21-23, in Louisville

Highlighting the 1971 KMA Annual Meeting will be presentations and discussions by 16 prominent guest speakers who have accepted invitations to appear on the scientific program of the three-day session, which will be held September 21-23 at the Convention Center, Louisville, according to John C. Quertermous, Murray, KMA President.

The KMA Scientific Program Committee has worked to arrange an outstanding program which will interest physicians in every medical specialty. Guests of the Association, specialty group speakers, and local physicians will speak at the four general sessions on a number of medical topics.



Doctor Nyhus



Doctor Selawry

A few of the themes chosen for the general session presentations are "Cancer Symposium—Aids and Diagnosis," "Immunology," and "Hypertension."

An Ask the Expert session, to be featured on this year's program, will include many individual informal discussions.

Other features of the 1971 session include meetings of the 16 specialty groups, two meetings of the KMA House of Delegates, the President's Luncheon, technical and scientific exhibits, an Orientation Program for new members, and meetings of the Woman's Auxiliary to KMA.

Among those invited by the Association to participate in this year's Annual Meeting are Lloyd M. Nyhus, M.D., Chicago, and Oleg S. Selawry, M.D., Washington, D.C.

Doctor Nyhus will address the September morning and afternoon sessions. He will speak on "Peptic Esophagitis" and "New Approaches to Surgery for Duodenal Ulcer."

Doctor Selawry will speak at the September 21 morning session. The title of this talk will be "Efficacy of Bone Marrow Examination for Diagnosis and Staging of Patients with Lung Cancer."

Further details on other speakers and highlights of the KMA Annual Meeting will be carried in future issues of *The Journal.*

Scientific Exhibitors Urged To Make Plans

All physicians interested in presenting scientific exhibits at the 1971 KMA Annual Meeting are urged to make their plans and application to do so, according to Benjamin B. Jackson, M.D., Louisville, Chairman of the KMA Scientific Exhibits Committee.

Exhibits need not be expensive or professionally constructed, but should have a good subject and be of teaching value. An application for the scientific exhibits is on page 401 of this *Journal.* For further information, please contact the KMA Headquarters Office.

Kentucky Board Of Health Appointments Made

Governor Louie B. Nunn recently announced that Guy C. Cunningham, M.D., Ashland; Robert C. Long, M.D., Louisville; and John E. Trevey, M.D., Lexington, have been appointed to the Kentucky State Board of Health for four-year terms. All three physicians have been active in KMA and other medical organizations, as well as assuming responsible leadership roles in their communities.

A pediatrician, Doctor Cunningham has served on numerous KMA committees and as President of the Kentucky Chapter, American College of Pediatrics. Doctor Long is a gynecologist and is currently active on KMA committees, being Chairman of the Public Relations Committee. He served the AMA for a number of years as a member of the AMA Board of Trustees. Doctor Trevey is Medical Director of a large corporation in Lexington, Chairman of KMA Committee on Environmental Quality, and serves in several capacities with his State Association.

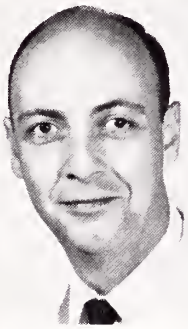
In another appointment, William W. Hall, M.D., Owensboro, was named to the Comprehensive Health Planning Council. Doctor Hall was Chairman of the KMA Board of Trustees in the Associational year of 1969-1970. Robert E. Pennington, M.D., London, was reappointed to the Council. Doctor Pennington was President of KMA in 1966-1967.

Ky. Surgical Society Plans Annual Meeting, May 14-15

The 1971 Annual Meeting of the Kentucky Surgical Society will he held May 14-15, at Lake Cumberland State Park, Jamestown. About 200 members and guests are expected to attend.



Doctor Culp



Doctor DePalma

David A. Culp, M.D., Professor and Chairman of the Department of Urology of the University of Iowa, will speak on "Trauma of the Male External Genitalia."

Doctor Culp, a graduate of the Jefferson Medical College, Pennsylvania, is a Diplomate of the American Board of Urology, a Fellow of the American College of Surgeons, a member of the American Urological Association and the American Association of Genito-Urinary Surgeons. He has recently served as Chairman of the Section on Urology of AMA.

Ralph G. DePalma, M.D., Associate Professor of Surgery at Case-Western Reserve University School of Medicine and Associate Surgeon of University Hospitals, Cleveland, will speak on "Ancillary Measures in the Treatment of Patients with Peripheral Arterial Occlusive Disease."

Doctor DePalma is a graduate of New York University Medical School. He is a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons, member of the Society of University Surgeons, the American Association for the Advancement of Science, and the American Federation for Clinical Research.

In addition to the talks by these two visiting guest speakers, the meeting will feature presentations by several members of the Kentucky Surgical Society.

KMGA Is Reorganizing

The Kentucky Medical Golf Association is being reorganized, announces Mervel V. Hanes, M.D., Louisville. A new constitution and bylaws have been written and a meeting of interested physicians will be called within the next few weeks. The KMGA will be formally organized at that time and plans will be made to conduct a tournament and banquet this fall.

All interested physicians are urged to contact Donald Ware, M.D., or Mervel V. Hanes, M.D., both at Medical Towers South, Louisville, Kentucky 40202.

Kentucky Chapter, ACS, Meets And Elects Officers

Roy H. Moore, Jr., M.D., Louisville, was installed as President of the Kentucky Chapter of the American College of Surgeons at the meeting of the group, held March 12-13, at the Health Sciences Center, Louisville.

Officers elected at the meeting include: President-Elect Branham B. Baughman, M.D., Frankfort, and Secretary-Treasurer Richard D. Floyd, III, M.D., Lexington. Newly elected Councilors are: Samuel D. Weakley, Jr., M.D., Louisville, and William T. McElhinney, M.D., Covington.

Held simultaneously with the physician's meeting were two programs for nurses. Operating room nurses heard discussion on medico-legal problems, the historical development of operating room technicians, and interpersonnel relations with the anesthesiologist.

This year, for the first time, in cooperation with the Jefferson County Medical Society and KMA's Disaster Medical Care Committee, a training course for registered nurses who staff emergency departments throughout the state was presented. The program consisted of lectures, panel discussions, movies, and practical demonstrations with respirators and defibrillators.



Shown above are members and officers of the Association of Operating Room Nurses and the Kentucky Chapter of the American College of Surgeons who attended the meeting of ACS, held March 12-13. They are: (first row, from left to right) Phyllis Reed, AORN; Nancy Starks, Treasurer, AORN; Samuel D. Weakley, Jr., M.D., Secretary-Treasurer, ACS; Jackie Dickerson, Secretary, AORN; (second row) Delores Lozon, President, AORN; Delmas M. Clardy, M.D., President, ACS; Lucille Fox, Vice-President, AORN; and Donna Hobbs, AORN.

William M. Christopherson, M.D., Louisville, was recently elected President of the United States-Canada Division of the International Academy of Pathology. A graduate of the University of Louisville School of Medicine in 1942, Doctor Christopherson is presently the Chairman of Pathology at the school. He is also President of the Kentucky Division of the American Cancer Society and an adviser to the World Health Organization.

KHA Elects New Officers At Annual Convention

Paul W. Ahlstedt, FACHA, Administrator of Methodist Evangelical Hospital, Louisville, was installed as President of the Kentucky Hospital Association at the annual convention of the group held in Louisville, March 29-31. James V. Dorsett, Jr., Executive Vice-President of Western Baptist Hospital, Paducah, was chosen President-Elect.



Mr. Dorsett

Attended by 1880 persons, the three-day convention was held, for the first time, at Convention Center. Sixteen allied organizations participated in the successful meeting.

Highlighting a dinner held March 31, was the presentation of awards. Homer D. Coggins, Executive Vice-President of Kentucky Baptist Hospital, and Wade Mountz, President of Norton-Children's Hospital, were presented the Kentucky Hospital Association's Distinguished Service Award.

The KHA also presented Community Service Awards to Mrs. Binnie Bailey, Lexington; Mrs. Anne Conboy, Louisville; Mrs. Virginia Workman, Flemingsburg; and Mrs. Helen Rabye, Henderson. All four are members of the state hospital auxiliaries.

Other officers elected at the meeting are: Robert W. Walker, Paris, Treasurer; Eugene Watson, Georgetown, Blue Grass District Vice-President; W. Leon Hisle, Pineville, Cumberland District Vice-President; Sister Marie Victoria Fitzsimmons, Louisville, Ohio Valley District Vice-President; and James D. Collins, Owensboro, Twin Lakes District Vice-President.

Kentucky Dentists Hold 111th Annual Meeting

Two thousand, two hundred, and eighty-one persons registered for the 111th Kentucky Dental Association Meeting, held April 4-7 in Louisville. Installed as the new president of the Association was Paul W. Evans, D.M.D., Ashland.



Doctor Evans

The convention combined scientific sessions, exhibits, social events, and meetings of the Woman's Auxiliary to KDA, the Kentucky Dental Assistant Association, and the Kentucky Dental Hygienists' Association.

A meeting of the House of Delegates of KDA resulted in the passing of a resolution urging the Selective Service System to change its method for securing dentists. The resolution states that the military should take seniors graduating from dental schools rather than young dentists already set up in practice.

A highlight of the meeting was a talk by John M. Deines, D.D.S., Seattle, Washington, President of the American Dental Association. He praised Kentucky for the fact that 80 per cent of the State's public water supply is fluoridated.

Officers elected at the meeting are: Glen R. Carwell, D.M.D., Bowling Green, President-Elect; Davis Elam, D.M.D., Ashland, First Vice-President; and James Huston, D.M.D., Louisville, Second Vice-President. Theodore E. Logan, D.M.D., Louisville, outgoing President, is the new delegate to the American Dental Association.

Kentucky IMA Holds Meeting And Elects Officers

Eugene H. Kremer, III, M.D., was installed as President of the Kentucky Industrial Medical Association at the 12th Annual Meeting of the group, held in Louisville, April 1.

Eighty persons attended the meeting and heard Marcus M. Key, M.D., Assistant Surgeon General, speak on the Occupational Safety and Health Act of 1970; William B. Stodgill, M.D., discuss "Drug Abuse in Industry"; and Merle Bundy, M.D., President of the national IMA, speak on "The Future of Occupational Medicine in America."

Officers elected at the meeting are: J. Luther Fuller, M.D., Louisville, President-Elect; William F. Hawn, M.D., Louisville, Vice-President; Gradie R. Rowntree, M.D., Louisville, Secretary-Treasurer. Paul M. Hullett, M.D., Louisville; Eugene H. Kremer, Jr., M.D., Louisville, and Walter L. O'Nan, M.D., Henderson, were elected to the Board of Directors.

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Highlights Of 1971 KMA Interim Meeting

Highly informative panel discussions and several stimulating individual speeches were highlights of the 1971 KMA Interim Meeting which was held at Cave City on April 15-16. The meeting, termed very successful by officers of the Association, was attended by 200 physicians, their wives and guests.

In addition to the presentation of the guest speakers, the Interim Meeting included two meetings of the KMA Board of Trustees and a meeting of the Woman's Auxiliary to KMA.

The first session on Thursday morning opened with a panel discussion on liability insurance, moderated by Thornton E. Bryan, Jr., M.D., Cadiz. The panel consisted of Riley Lassiter, General Agent of the Medical Protective Company, and David Powers, Director of the Management Services Division of the American Medical Association.

Following the panel discussion on Thursday, Harry R. Hinton, Deputy Director of the AMA Public Affairs Division, gave a very meaningful talk on "Medicine's Priorities." Mr. Hinton discussed at length the Washington situation and many of the legislative problems facing American medicine today.

On Thursday evening, preceding the second session, KMA President, John C. Quertermous, M.D., Murray, presented a special award to C. C. Howard, M.D., Glasgow, in recognition of his 25 years as Chairman of the Rural Kentucky Medical Scholarship program. The award was accepted by Doctor Howard's daughter, Carolyn McKinley, M.D., Glasgow, since Doctor Howard was unable to attend.

Doctor Quertermous also presented checks from AMA Education and Research Foundation to the deans of Kentucky's two medical schools. Douglas M. Haynes, M.D., Louisville, Dean of the University of Louisville School of Medicine, accepted a check for $7,538.56 for the University of Louisville. William E. Jordan, M.D., Dean of the University of Kentucky College of Medicine, accepted a check for $3,754.26 for the University of Kentucky.

The main speaker for the second session was Tim Lee Carter, M.D., Tompkinsville, member of Congress from Kentucky's Fifth District. Doctor Carter gave a very vital and informative message on "Congress and Health Care."

On Friday morning, the third and final session opened with a speech by Carl Anderson, M.D., Chairman of the Board of Trustees of California Blue Shield. The topic of Doctor Anderson's speech was, "Peer Review and the Voluntary System."

Following Doctor Anderson's presentation, a panel discussion, moderated by Marvin A. Bowers, Jr., M.D., Louisville, on the subject, "Peer Review in Action," was held. Members of the panel were: Walter L. Brewer, M.D., Lexington; H. Burl Mack, M.D., Peewee Valley; Carl Anderson, M.D., Santa Rosa, California; and James Rogers, Acting Director of the Medical Assistance Division in the Department of Health. The panel engaged in a lengthy question and answer session following their presentation.

The 21st Interim Meeting of KMA was adjourned at noon on Friday by Doctor Quertermous, who commented that "the panel discussions and individual presentations had been very informative, stimulating, and interesting for all those in attendance."

Additional information and pictures taken at the Interim Meeting will appear in the June issue of *The Journal.*

Journal Deadline Is 15th

For the information of all physicians and organizations planning to submit news items to be included in *The Journal,* the deadline for receiving this information is always the 15th of the month preceding the month of issue. For example, material to appear in the July issue must be in *The Journal* office no later than June 15.

The Journal staff is always grateful for items submitted and is appreciative of the cooperation shown by contributors of information to be considered for publication. Unfortunately, in many instances, we have not been able to include material because it was received after the deadline.

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A Reminder About Your KMA Placement Service

Perhaps you have just completed your internship, residency, military obligation, or have some other reason for needing to make a change. Perhaps you need an associate or a replacement. If so, you will be pleased to know that the Kentucky Medical Association has a Physicians Placement Service.

The Physicians Placement Service is a free service designed to help physicians find a desirable area in which to establish practice or to relocate, and to help already established physicians who want an associate.

The Physicians Placement Service of the Kentucky Medical Association publishes a semiannual listing of "Opportunities for Practice in Kentucky" which lists over 100 areas needing family practitioners either in association with another physician or as a replacement. It maintains a similar listing of areas in need of all specialists in any particular field.

There are opportunities for partnership or group practice, quite often with no investment necessary and/or other special financial arrangements planned. The Service accepts requests from both physicians and communities for satisfactory placement.

As an additional service to you, the Physicians Placement Service of the Kentucky Medical Association also publishes "Physicians Seeking Locations," a quarterly listing. This is compiled from data received from the American Medical Association, requests from recipients of the Rural Kentucky Medical Scholarship Fund, interns and residents in Kentucky, and personal inquiries to the KMA office. It is our policy to provide a two-way flow of information between interested parties, rather than try to "place" physicians in the "right" practice situation.

The Physicians Placement Service sends a questionnaire to the applicant physician to obtain information on his educational background, his interests, and preference of type of practice. Upon return of the questionnaire, the physician is sent a list of openings in his area of interest. Each opening is detailed on its facilities for home life, office space, proximity to hospital facilities, and other specifics.

Each physician contacting this office for assistance in finding a suitable location for practice is requested to complete a questionnaire in order that his name may be carried on the next listing of "Physicians Seeking Locations."

The Physicians Placement Service offers its assistance to all qualified physicians who request it. An applicant need not be a member of the state medical association. There is no charge either to the physician or to the community seeking the services of this program.

Inquiries may be addressed to the Physicians Placement Service, Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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In Memoriam

LOTTE K. BERNSTEIN, M.D.

Louisville
1896-1971

Lotte K. Bernstein, M.D., 74, one of Louisville's first psychoanalysts and a specialist in child psychiatry, died February 14. A native of Berlin, Germany, Doctor Bernstein came to the United States in 1951. After coming to Louisville, she became Clinical Director of the Child Guidance Clinic. She had also served as a Professor of Psychiatry at the University of Louisville School of Medicine and as a Consultant for the State Department of Mental Health.

IRVING L. DENTON, M.D.

Fordsville
1881-1971

Irving L. Denton, M.D., 89, a Fordville physician for more than 50 years, died March 15. Doctor Denton, a graduate of the Barnes Medical College in 1904, had been retired since 1960. He was a member of the Ohio County Medical Society, and the Kentucky and American Medical Associations.

ADDIE M. LYON, M.D.

Ashland
1888-1971

Addie M. Lyon, M.D., 83, one of Kentucky's public health pioneers, died February 26 in Ashland. Doctor Lyon had served as Kentucky's Commissioner of Welfare, Director of that department's (then) Division of Mental Hygiene and Hospitals, Superintendent of Central State Hospital, Superintendent of Western State Hospital, Superintendent of (then) Kentucky Training Home, and as Public Health Officer for Boyd County. A graduate of the University of Louisville School of Medicine in 1912, he practiced medicine in Sandy Hook until he entered state service in 1926.

U-L Medical School Reactivates Continuing Education Program

Douglas M. Haynes, M.D., Dean of the University of Louisville School of Medicine, announced recently that after a lapse of several years, the school has reactivated the Office of Continuing Education with funds made possible through the Ohio Valley Regional Medical Program.

These funds enabled the University of Louisville School of Medicine to appoint Mr. Gerald D. Swim as full-time Assistant Director for Continuing Education. Mr. Swim, with a background of public school teaching, business, and public health administration, assumed his position March 1, 1971.

Charles F. Blankenship, M.D., Professor and Acting Chairman, Department of Comprehensive Medicine, will continue to serve as Acting Director for the Office of Continuing Education until a full time director is appointed.

Doctor Blankenship and Mr. Swim can be reached by calling (502)582-2211, extensions 256 or 257, or by writing the University of Louisville School of Medicine, Department of Comprehensive Medicine, Office of Continuing Education.

It is the intention of the School of Medicine to continue to coordinate its efforts in this field with those of the University of Kentucky College of Medicine and its Office of Continuing Education, announced Doctor Haynes.

The University of Louisville program is currently being structured; and organized medical groups, individuals with particular interests or ability in continuing education, and health and medical officials are being contacted for advice as to how the program can be made most useful to medical education and to the practicing physicians of the State.

Jerry W. Conners, M.D., is now in family practice with Jerry C. Sutkamp, M.D., in Bellevue. A graduate of the University of Louisville School of Medicine, Doctor Conners interned at the Memorial Hospital in Long Beach.

David E. Brown, M.D., a psychiatrist, is now practicing medicine in Louisville. A graduate of the University of Louisville School of Medicine, Doctor Brown interned at St. Elizabeth Hospital, Washington, D.C., and served his residency at the Cornell University Medical School.

Warren F. Ricchetti, M.D., is practicing medicine with Yung K. Im, M.D., in Covington. A specialist in pathology, Doctor Ricchetti attended medical school, interned, and served his residency at the University of Oklahoma.



NEWS ITEMS

Mrs. Jane Teare McCormack, 87, widow of Arthur T. McCormack, M.D., former Kentucky Commissioner of Health and Executive Secretary of KMA, died April 2 in Louisville. Mrs. McCormack was the editor of *The Journal's* Woman's Auxiliary Section until 1942.

James R. Heckman, Louisville, a second year medical student at the University of Kentucky, has won the G. Milton Shy Award in Clinical Neurology. The award is given to only one medical student in the U.S. each year by the American Academy of Neurology. The Academy selected Mr. Heckman on the basis of an essay on the measurement of nerve functions.

Yosh Maruyama, M.D., formerly Acting Administrative Director of the Division of Radiotherapy at the University of Minnesota Medical School, has been appointed Professor and Chairman of the Department of Radiation Medicine at the University of Kentucky College of Medicine. A graduate of the University of California, Berkeley, and of its Medical School in San Francisco, Doctor Maruyama received his specialty training at the Massachusetts General Hospital in Boston. He was a James Picker Advanced Fellow in Academic Radiology and has studied at Stanford University.

Henry B. Asman, M.D., Louisville, former President of KMA, was recently elected a Director of the Kentucky Chamber of Commerce. Also elected was J. Ed McConnell, President, Kentucky Blue Cross and Blue Shield.

John L. Wolford, M.D., Louisville, has been granted Fellowship in the American College of Cardiology, the national medical society for specialists in cardiovascular diseases. He is among a group of 211 from the United States and Canada recently admitted to College's highest membership classification.

Carl W. Kesner, M.D., has joined John C. Baker, M.D., and Dwight L. Blackburn, M.D., in practice in Berea. Doctor Kesner graduated from the University of Tennessee School of Medicine, interned and served his residency in surgery at the St. Joseph Hospital, Memphis, Tennessee.

Lawrence F. Jelsma, M.D., has joined Franklin Jelsma, M.D., and Paul J. Ross, M.D., in practice in Louisville. A specialist in neuro-surgery, Doctor Jelsma graduated from Johns Hopkins Medical School, interned at the University of Kentucky Medical Center, and served his residency at the Johns Hopkins Hospital.



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County Medical Societies List Officers for 1971

The following is the third part of a list of county medical society officers for this year, made available by the Membership Department of KMA. The first and second parts of the list can be found in the February and March issues of *The Journal.*

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But the word "only" has an ironic ring to ecologists who warn of cities resembling overcrowded, contaminated rat colonies, of respiratory and mental diseases reaching epidemic proportions and of a health-care community virtually overwhelmed by the burden.

The global consequences may be no less devastating. Ecologists estimate that every American has roughly fifty times the negative impact on the Earth's life-support systems of, say, a citizen of India. In these terms, adding 75 million Americans would be equivalent to adding 3.7 billion Indians to the world population.

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Actions—Demulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Demulen depresses the output of both the follicle-stimulating hormone (FHS) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain [1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted; anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

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SEARLE Where "The Pill" Began

G. D. Searle & Co., P.O. Box 5110, Chicago, Illinois 60680

Mylanta®
24 million hours a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.



Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

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Division of Atlas Chemicol Industries, Inc., Wilmington, Del. 19899

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BUILDING BLOCK
TO RECOVERY



Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

The causes of vaginitis are multiple



Trichomonads...monilia...bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (aminacrine hydrachloride 0.2%, sulfanilamide 15.0%, allantoin 2.0%)

Suppositories (aminacrine hydrochlaride 0.014 Gm., sulfanilamide 1.05 Gm., allantoin 0.14 Gm.)

Contraindications: Known sensitivity to sulfonamides.
Precautions/Adverse Reactions: The usual precautions for topical and systemic sulfanamides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria ar other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream—Four-ounce tube with or without applicator. Suppasitories—Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular

This "case history" runs to some 10,000 pages

This is a typical "case history" of one new drug—or, rather, a proposed new drug—assembled for submission to the U.S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers—a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

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This message is brought to you as a courtesy of this publication on behalf of the producers of prescription drugs.

When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY
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Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, music therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

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(3) Charles W. Neville, Jr., M.D.
Associate Professor of Psychiatry
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For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE

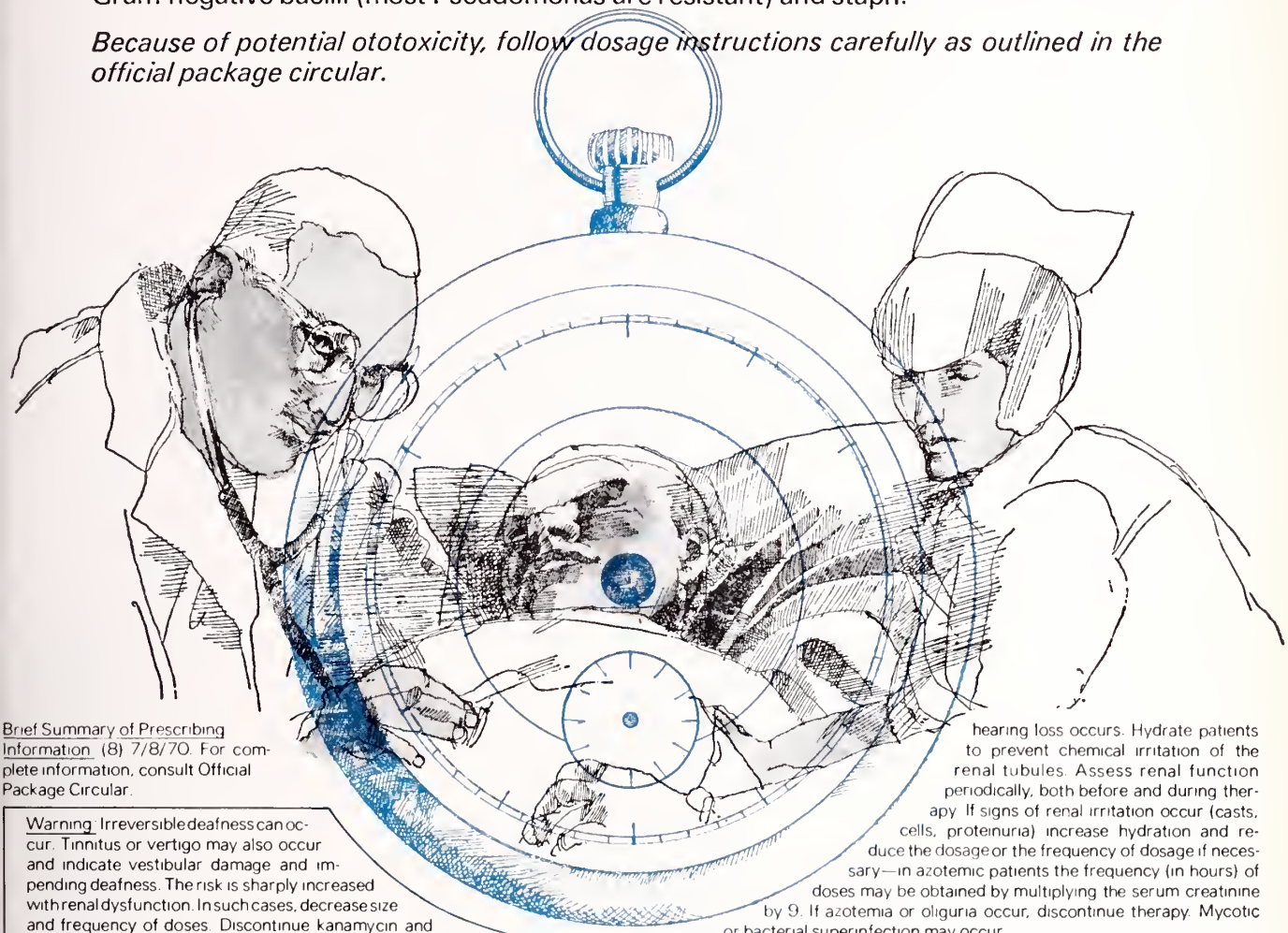
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Nutley, New Jersey 07110

A valuable hospital antibiotic —when there is no time

in severe systemic infections—postoperative bacteremia, Gram-negative/staph pneumonias or neonatal sepsis—Kantrex® (kanamycin sulfate) is often indicated before results of customary sensitivity tests can be reported. Clinical response is often seen within 24-48 hours in susceptible infections, with remission soon after.

10 years of experience confirm the continuing effectiveness of Kantrex® against many Gram-negative bacilli (most Pseudomonas are resistant) and staph.

Because of potential ototoxicity, follow dosage instructions carefully as outlined in the official package circular.



Brief Summary of Prescribing Information (8) 7/8/70. For complete information, consult Official Package Circular.

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *Enterobacter aerogenes, K. pneumoniae, Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.

Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective alternative therapy is available.

Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary—in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.

Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.

Dosage and Administration: The maximum total daily dose should not exceed 1.5 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours. If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.

Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available—Pediatric Injection 75 mg. in 2 ml.

A.H.F.S. Category 8:12:28

BRISTOL LABORATORIES
Division of Bristol-Myers Company, Syracuse, New York 13201

KANTREX® INJECTION
(kanamycin sulfate)


Gone with the wind

The gas/acid group of disorders

"The two most common complaints referable to the upper gastrointestinal tract for which patients seek medical relief are hyperacidity and 'gas.' The two often occur together."*

Frees captured gas...neutralizes free acid

SILAIN-GEL Tablets and Liquid are separate formulas designed to provide equivalent dual-action symptomatic relief. Both dosage forms contain simethicone which effectively frees trapped gas, enabling the patient to eliminate it. Magnesium hydroxide in both assures a rapid rise in pH for prompt relief of hyperacidity. The special co-dried aluminum hydroxide/magnesium carbonate gel in the tablets assures the same rapid and uniform reaction rate as the liquid. Thus, both medications achieve prompt and prolonged neutralization of free acid *plus* prompt relief from the pain and pressure of trapped gas.

Always in good taste

The pleasant, distinctive flavor of SILAIN-GEL, as well as its non-constipating feature, make it a therapy your patients can live with—in comfort and without complaint.

Select the form of SILAIN-GEL you want to provide symptomatic relief in: gastric ulcer • duodenal ulcer • heartburn • gastric hyperacidity • gastritis • dyspepsia

when the patient prefers the convenience of a tablet, select

Silain-Gel® Tablets:

when the patient prefers a liquid, select

Silain-Gel® Liquid

Also available for the patient who needs an antifrothicant/antiflatulent agent only: **Silain®** (simethicone) Tablets

*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

Announcing the "Antgasid"

Silain-Gel®

Tablets: simethicone plus aluminum hydroxide/magnesium carbonate co-dried gel and magnesium hydroxide

Liquid: simethicone plus aluminum hydroxide and magnesium hydroxide

one dose does both: frees captured gas...neutralizes free acid

A·H·ROBINS A.H. Robins Company, Richmond, Virginia 23220

sterile solution (300 mg. per ml.)

Consider Lincocin®

(lincomycin hydrochloride, Upjohn)

and single-dose 2 ml
disposable syringe

For your convenience
in 2 ml. and 10 ml. vials...



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Upjohn THE UPJOHN COMPANY
KALAMAZOO, MICHIGAN 49

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin'®

Compound with Codeine Phosphate gr. 1/2 No. 3

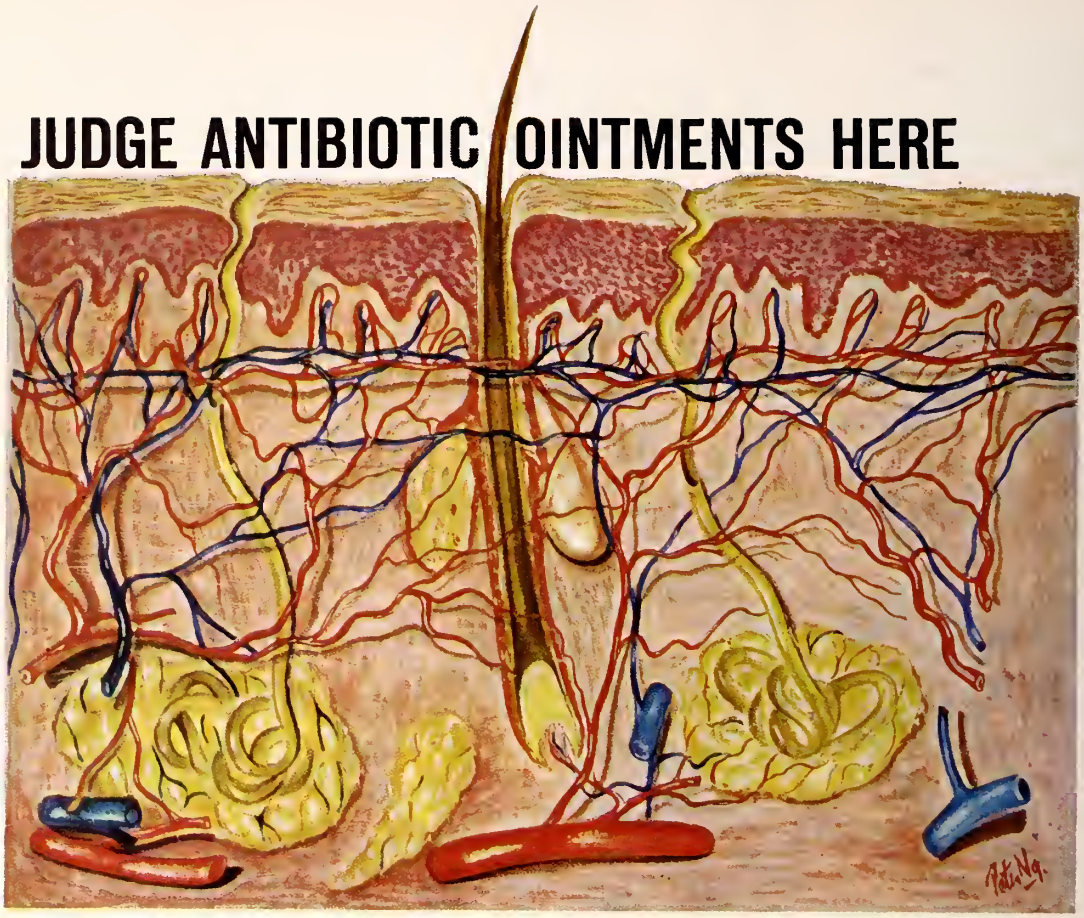
Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

'B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

when an unnerving experience compounds the pain



the compound analgesic that calms instead of caffeinates

In addition to pain, this patient has experienced anxiety, fear, embarrassment, and frustration. No doubt these psychic factors actually increased her perception of pain. Surely the last thing she needs is an analgesic containing caffeine. The logical choice is Phenaphen with Codeine. It provides a quarter grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can control the pain more effectively. It's no accident that the Phenaphen formulations contain a sedative rather than a stimulant. Don't you agree, Doctor, that psychic overlay is an important factor in most of the accident cases you see?

Phenaphen®
with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4) (warning: may be habit forming). **Indications:** Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.
A. H. Robins Company, Richmond, Va.

A·H·ROBINS



'head clear upon arising'

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

prescribing information appears on next page

A·H·ROBINS

A. H. Robins Company
Richmond, Va. 23220

Dimetapp® Extentabs

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

Dimetapp Extentabs®

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.
CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.
WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.
HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

LEASING
TAILORED FOR
Doctors!

The quickest, easiest,
most economical way to
acquire a car.

Conserve your precious time and keep your cash!

Let us do your
Car shopping for you!
(Any make or model)

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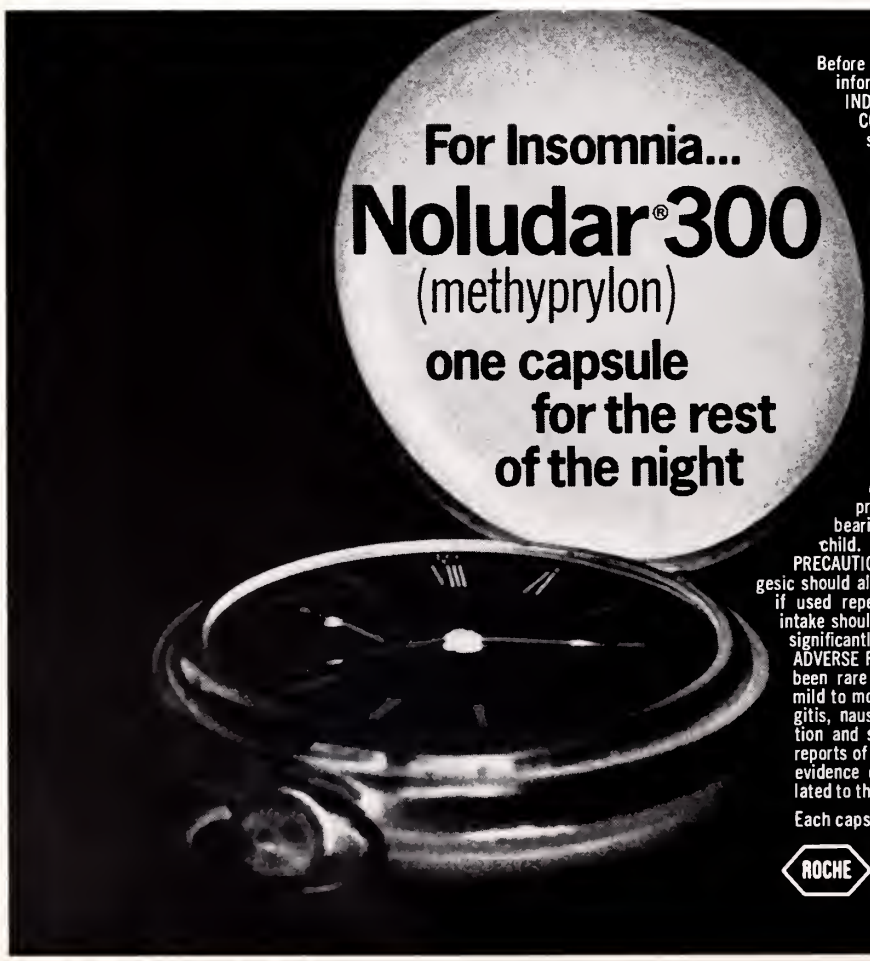
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products

...none is lower priced

TETRACYCLINE HCl 25 mg. NYSTATIN 25,000 U./cc.

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374-1



For Insomnia...

Noludar®300

(methyprylon)

one capsule
for the rest
of the night

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

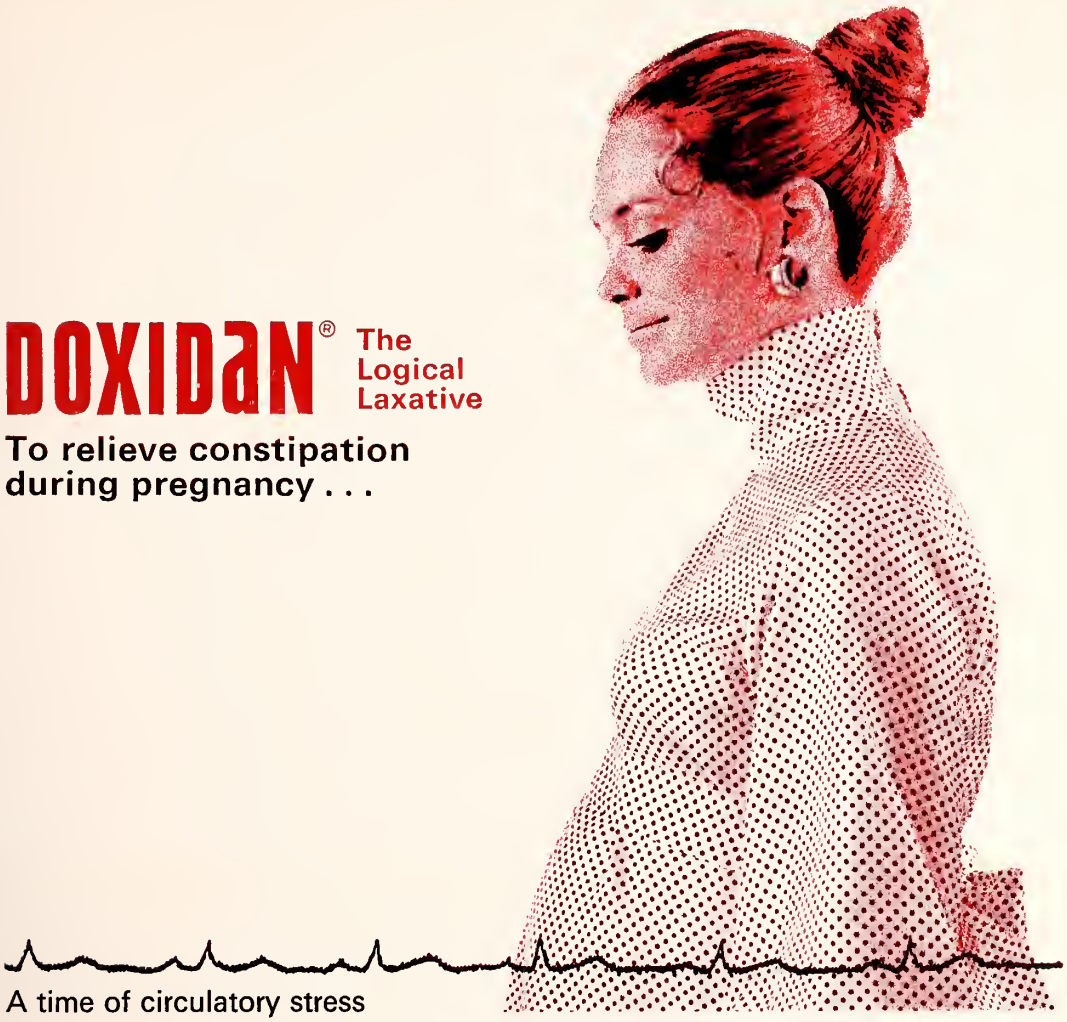
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

DOXIDAN® The Logical Laxative

To relieve constipation during pregnancy . . .



A time of circulatory stress

Doxidan gently relieves constipation in prepartum or postpartum patients and reduces the hemodynamic burdens of straining at stool.

gently . . . a highly effective fecal softener

predictably . . . a gentle peristaltic stimulant

economically . . . Doxidan costs less per effective dose*

Composition: Each capsule contains 50 mg. danthron N.F. and 60 mg. dioctyl calcium sulfosuccinate.

Dosage: Adults and children over 12—one or two capsules daily. Give at bedtime for two or three days or until bowel movements are normal.

Supplied: Bottles of 30, 100 (FSN 6505-074-3169) and 1000 (FSN 6505-890-1247).

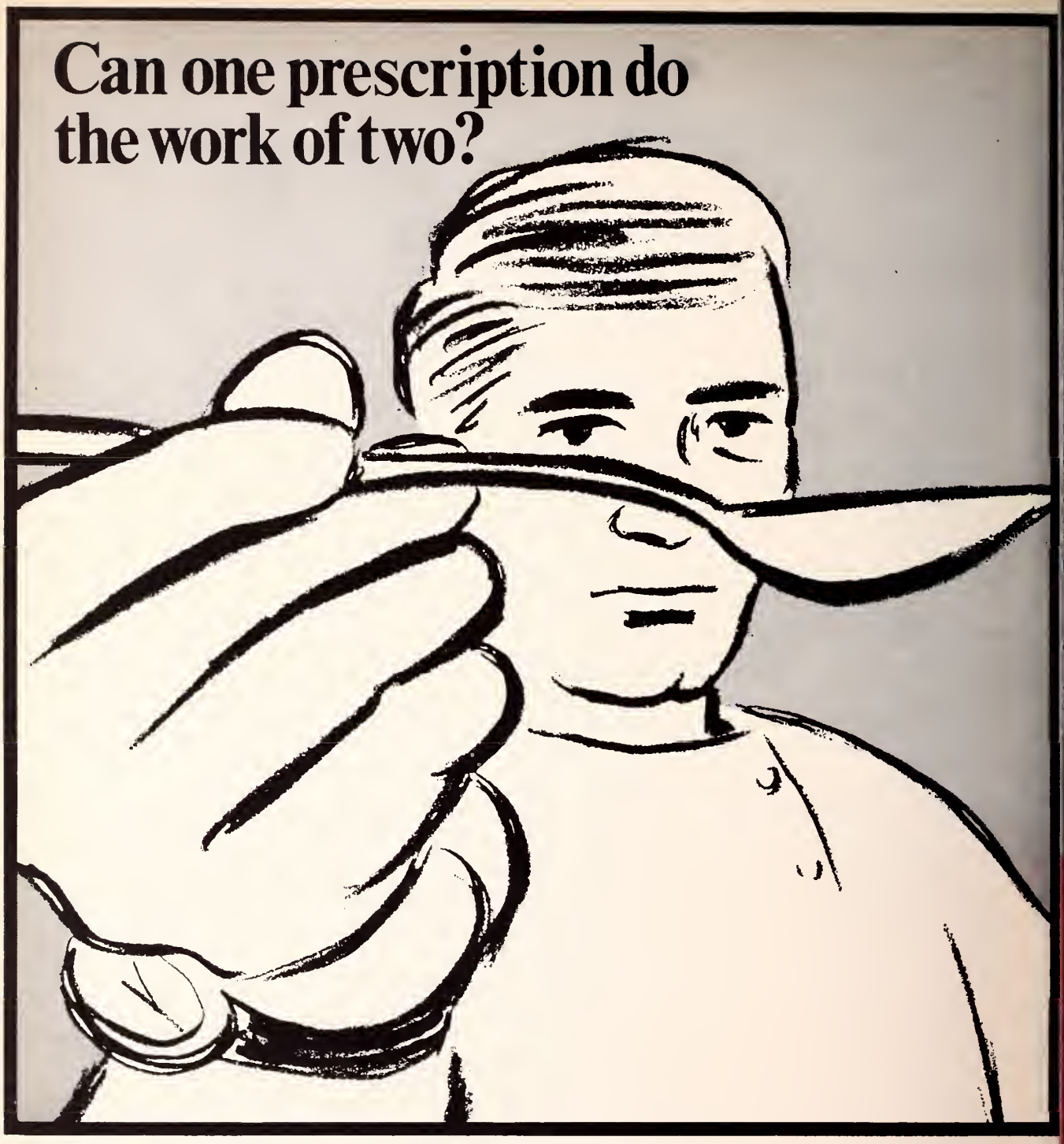
DOXIDAN® The Logical Laxative

HOECHST
PHARMACEUTICAL CO.
Somerville, N.J. 08876 U.S.A.

C-143

*based on actual drug store survey of prescribed dosages.

Can one prescription do the work of two?



Yes, Kolantyl®.

Kolantyl Gel/Wafers contain aluminum hydroxide/magnesium hydroxide, and Bentyl® (dicyclomine hydrochloride) too.

Merrell

The Wm. S. Merrell Company
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

0-2572 (2172)

Clinical Extension of a pure Smooth Muscle Relaxant

TROCINATE®

Brand THIPHENAMIL HCl

400 mg./100 mg. S/C tablets

Trocinate relaxes all smooth muscles. Its direct action (musculotropic) does not involve the autonomic nervous system and it is not mydriatic. It is metabolized by the body and eliminated in the urine as harmless degradation products. Trocinate has a remarkable history of freedom from side-effects.

When a pure direct-acting smooth muscle relaxant is indicated, Trocinate is the drug of choice.

DIARRHEA (functional) . . . *the first 400 mg. tablet usually relieves the discomfort of diarrhea so promptly that it ceases to be a bother.*

DIVERTICULITIS—MUCOUS COLITIS . . . *the accompanying discomforts can be relieved by this direct smooth muscle relaxant.*

BLADDER SPASM . . . *relaxation is immediate. One or two tablets condition the bladder for cystoscopy in one hour.*

SPASTIC URETER . . . *the specific relaxing effect of Trocinate on the spastic ureter has been proven by animal studies and affirmed clinically. (J. Urol. 73:487-93)*

NOTE: *The high therapeutic index of Trocinate permits its administration in dosage sufficient to relieve smooth muscle spasm promptly. 400 mg. dosage usually creates a therapeutic blood level. In reducing dosage after relief, lengthening the time between dosage rather than lessening the recommended dose is preferable. The prompt direct action allows a consciousness of the first suggestion of return of symptom . . . a guide to dose spacing and to determining when treatment is complete. A prescription for twelve or sixteen 400 mg. tablets will usually correct spasm and leave a few tablets for a reserve.*

PRESCRIBING INFORMATION

WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

WILLIAM P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
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Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

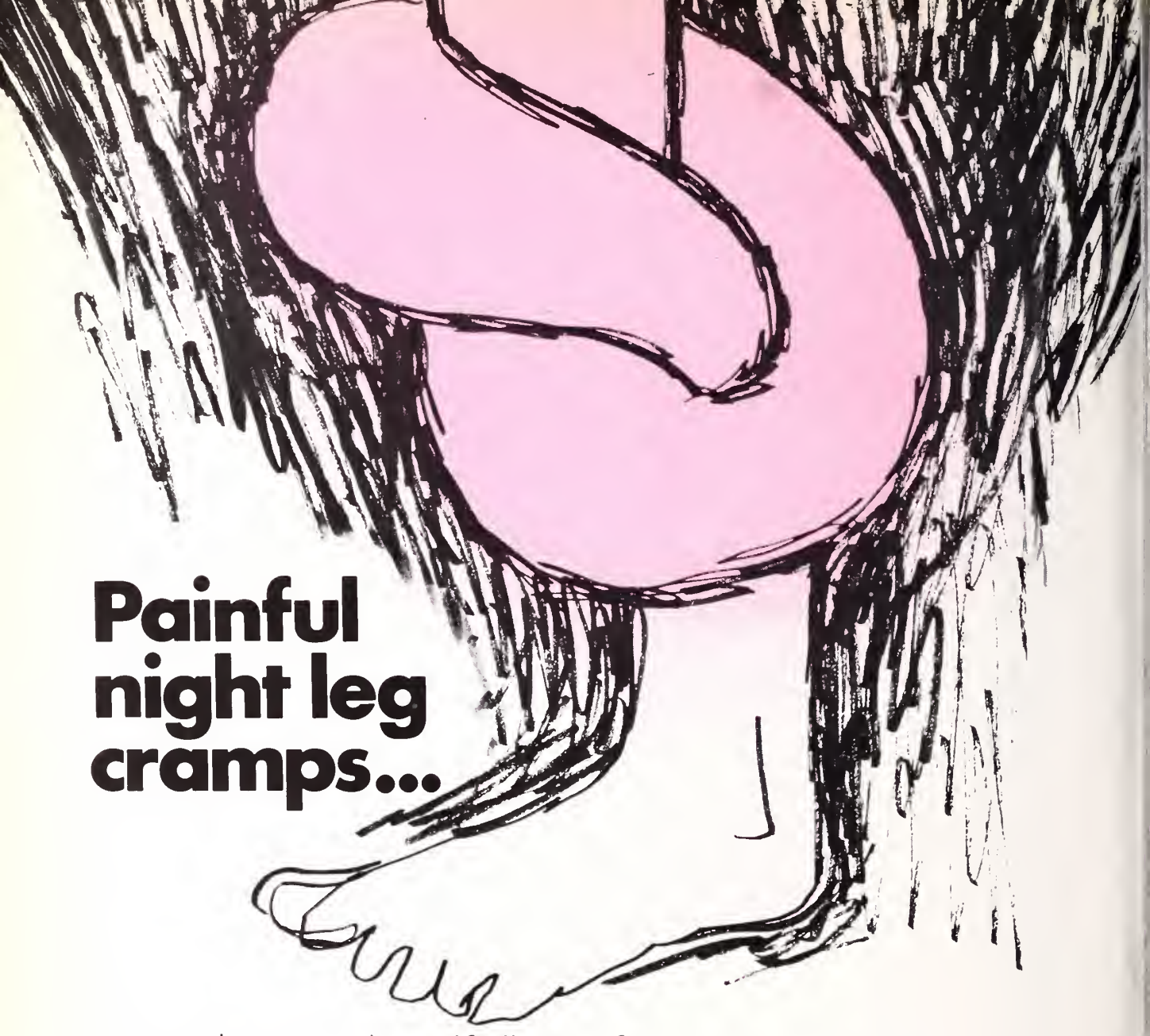
Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U S PATENT NO 3,001,910

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One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

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Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1971 Annual Meeting — Kentucky Medical Association

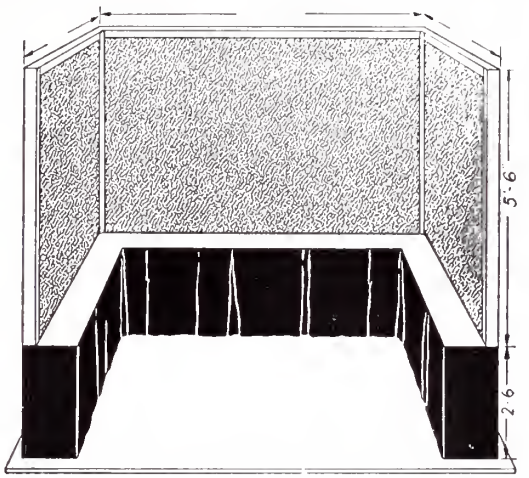
Convention Center — **Louisville, Kentucky** — **September 21, 22, 23**

Fill Out and Mail to:

BENJAMIN B. JACKSON, M.D., Chairman
Committee on Scientific Exhibits
Kentucky Medical Association
3532 Ephraim McDowell Drive
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Applications for space should be received before July 1, 1971.

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit:
2. Name (s) of Exhibitor (s):
 Institution (if desired):
 Mailing Address:
3. Do you have a built-in exhibit?
4. Description of Exhibit: (Attach brief description not to exceed 50 words to this blank.)
5. Exhibit will consist of the following: (check which)
 Charts and Posters.... Photographs.... Drawings.... X-rays
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 (Describe)
6. Booth Requirements:
 Amount of total wall space needed?
 Back wall?
 Shelf desired? (yes or no)
7. Indicate sources of assistance provided to you in connection with the exhibit.

8. Has this exhibit been exhibited before? If so, when & where?

Date

Signature of Applicant

The Kentucky Medical Association will provide, without cost to the exhibitor, the following: exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the Committee on Scientific Exhibits.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor, as well as cost of cards, signs, etc. which are a part of the exhibit.

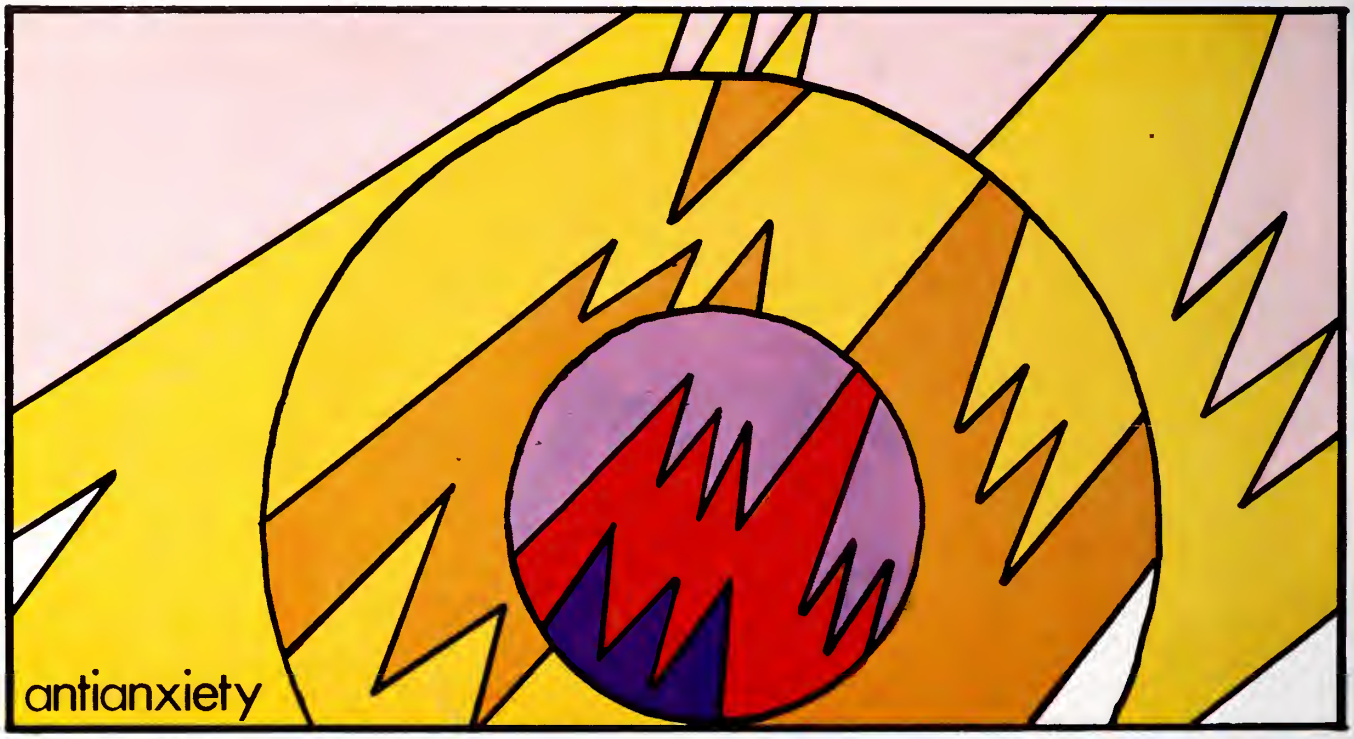
View boxes, furniture, decorations, etc. may be rented, if desired, by applying to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202, who supply equipment for the KMA Annual Meeting.

Due to the shortage of space, please have your exhibit as compact as possible.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosoge; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, hove been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitoted, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedotion, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combinotion therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instonces by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instonces, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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VOLUME 69 JUNE 1971 NUMBER 6

The Journal of The KENTUCKY Medical Association



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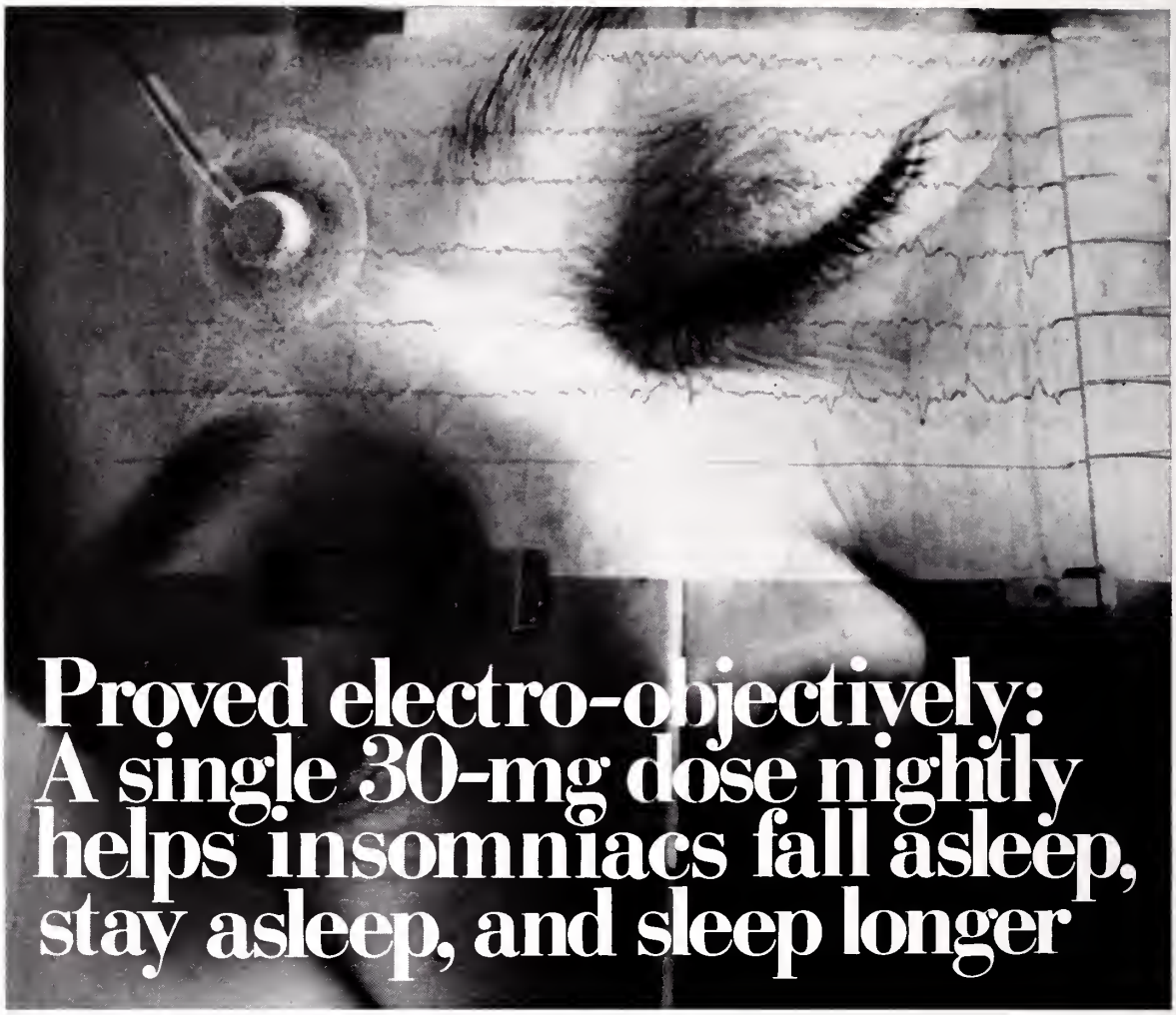
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We would like to call your attention to the change in The Journal cover. A drawing of the new University of Louisville Health Sciences Center has replaced the one of the old University of Louisville Medical School Building and the Medical-Dental Research Building.



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

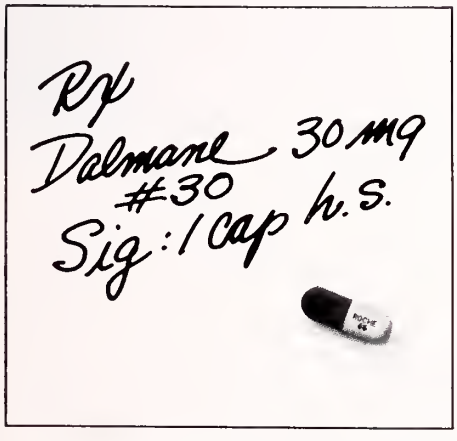
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.:* "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.:* "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

New **Dalmane®**
(flurazepam hydrochloride)

Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

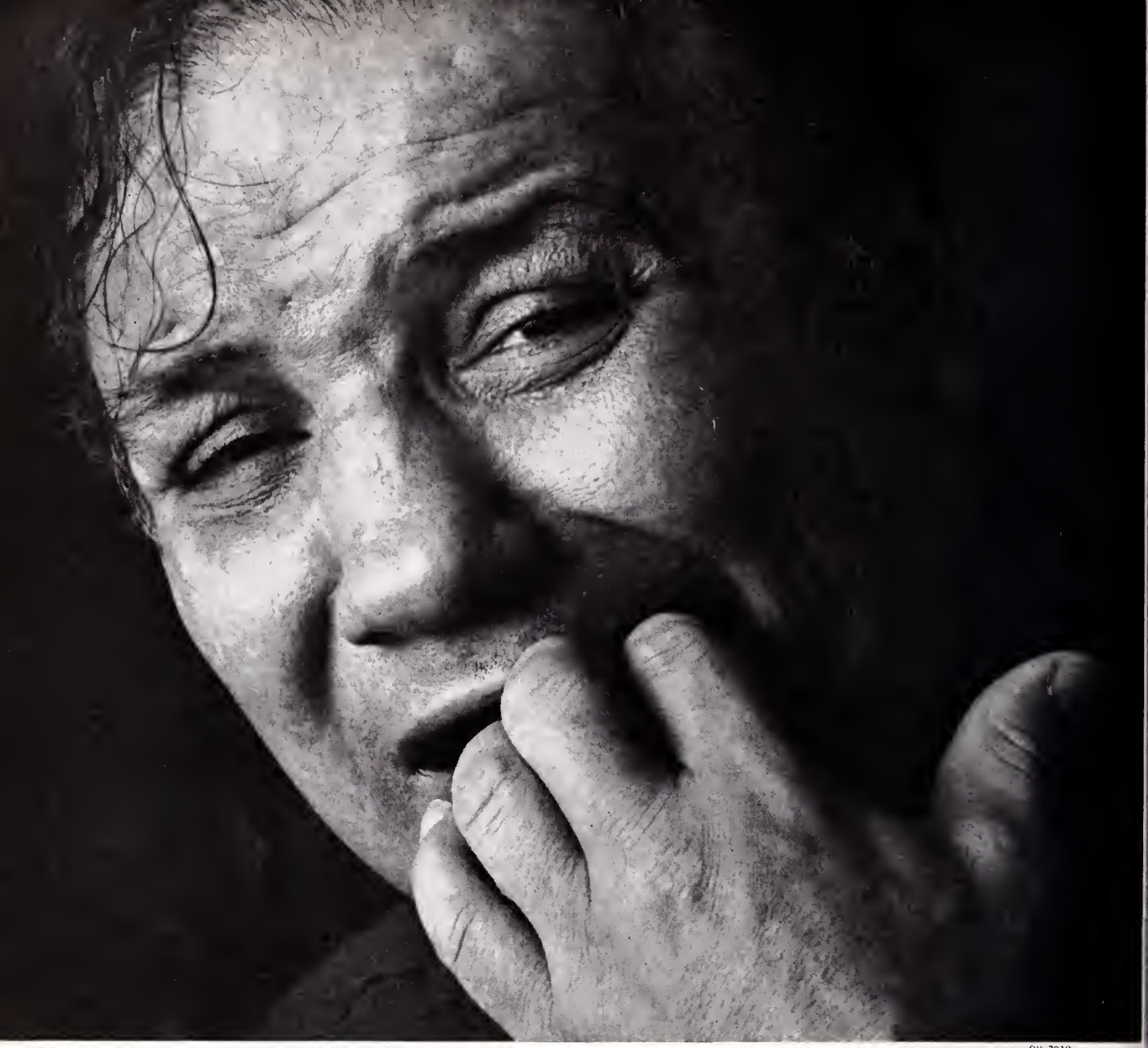
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity, have also been reported in rare instances.

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We all are. But Dulcolax is the cure for enemaphobia. It can do almost anything an enema can – except look scary.

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MESSAGE FROM THE PRESIDENT



A Kentucky Foundation For Medical Care

AT its meeting on April 14, the Board of Trustees of the Association accepted the recommendations of the Medical Economics Committee and approved the organization of a Foundation for Medical Care by KMA and authorized the development of a plan for submission to the House of Delegates in September. The Board further advised that no effort be spared in an effort to inform the entire membership of the underlying need for such a Foundation, the proposed scope of its endeavors, and the urgency for action, so that the Delegates may engage in a knowledgeable discussion and reach a wise decision.

Much has been written about Foundations for Medical Care. Innumerable national and regional meetings have been held, and already many state and county medical associations have organized foundations or are in the process of doing so.

The primary and impelling reason behind the development of a foundation is the desire on the part of the profession to assure the delivery of quality medical care to all citizens at a reasonable cost, whether publicly or privately financed, while preserving the American tradition of freedom of choice by both patient and physician and the fee-for-service concept.

The means for achieving these desirable goals are many and varied, as is evidenced by the different approaches taken by those associations whose foundations are already in operation. In all of them, however, there appears to be one area of agreement: peer review of over- and under-utilization is the key to quality medical care.

KMA has already made giant strides in this area through the efforts and diligence of the Claims and Utilization Review Committee, but much more can be done through the further development of regional utilization review committees, the development of norms or standards of medical care in Kentucky, increased efficiency of hospital utilization committees, stimulation of continuing medical education, and efforts toward improving the distribution of medical care in the Commonwealth—to mention but a few areas.

The decision facing the House of Delegates, then, would seem to be not whether KMA should organize a Foundation, but in what form do we wish our Foundation to function. In the ensuing months, you may expect to receive much detailed and specific information on this proposal. Hopefully, then, with knowledge and understanding, our elected representatives will, in September, make the right decision.

Henry B. Asman

CHAIRMAN, COMMITTEE ON MEDICAL ECONOMICS

This is the fourth in a series of articles written at the request of KMA President John C. Quertermous, M.D.



Umbrella Liability Insurance†

DOCTOR, take an inventory of your financial affairs! Ask yourself these two questions:

1) What is the total value of my assets today?
2) What is the total estimated value of future assets—such as inheritances, earning power, etc.?

If the sum total of the above figures exceeds the present per claim limit on your various liability policies, you have a possible serious problem. That is the diagnosis—the cure is Umbrella Liability Insurance.

Liability insurance has been defined as a method of protecting one's assets from loss as the result of legal action claiming negligence. One who has just been discharged in bankruptcy without any present or future assets needs no insurance protection in any amount; he is "judgment proof."

On the other hand, most physicians have achieved a degree of financial success, thereby becoming a prime target for lawsuits. The surest way to protect your assets from the costly situation that the "million dollar look" puts you in, is a $1,000,000 UMBRELLA LIABILITY POLICY. Limits of insurance higher than $1,000,000 are available, and should be considered where applicable.

There was a time when it was a rarity for a physician to be sued for malpractice (or anything else), but such is not the case today. Also, there was a time when judgments handed down by the courts were reasonable, but today's juries appear eager to award large amounts. Nearly every issue of any medical-economics publication carries a story about a substantial lawsuit brought against a physician for—not only professional activities, but also personal activities, as well (such as automobile, sports, and employee accidents). Therefore, for good "sleep insurance," it is most important for every physician to have an EXCESS UMBRELLA LIABILITY INSURANCE POLICY.

This type of excess insurance coverage is written by many companies, but they are not all alike. The premium charges vary substantially, as does the scope of the protection afforded. All companies require that certain underlying coverages be maintained in force (such as professional liability, automobile liability, personal liability, etc.) but differ on the amounts of required underlying limits.

In addition to providing excess protection over the underlying, with no broadening of the scope of those coverages, almost all policies provide coverage for "otherwise uninsured perils" with a retention—or deductible— varying from $250 to $10,000 per claim. Example of exposures that would fall into this category are as follows:

1) libel, slander, false arrest;
2) foreign country automobile liability;
3) liability arising out of the occasional use of rented equipment, such as boats, etc.;
4) fire legal liability;
5) water damage legal liability; and
6) liquor law liability (including host's liability).

Also, if you are under age 65, most companies offer up to $25,000 Excess Major

†Written at the request of the Editorial Board of The Journal

Medical Coverage at a very nominal premium. There is no required underlying insurance, but the coverage provided is usually is excess of $10,000. In view of rising hospitalization costs, this could become quite a factor.

It is evident that there are a good many variables and many types of policies on the market today. One would be wise to consult a professional insurance advisor before purchasing such insurance to be certain that all interests are covered as far as possible.

How much Excess Umbrella Liability Insurance should you have? The answer to that is your answer to the questions regarding your assets—both present and future.

How much does Excess Umbrella Liability Insurance cost? It varies with exposures and by insurance company; but as a rule of thumb, you can figure the malpractice portion will cost 20 to 35 per cent of your basic policy premium. The personal liability portion will cost around $70 to $100 per year, depending on exposures.

The big question, however, is—"Can I afford to be without it?"

J. M. VAN ZANDT
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INSURANCE COMPANY

MEDICAL SCHOOLS

Department of Pediatrics
University of Kentucky College of Medicine

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

The various members of the faculty of the Department of Pediatrics have among them special interests which cover most medical problems of children. They would like to help Kentucky doctors bring the best of care to Kentucky children. To this end, the following Pediatricians will be glad to talk to doctors about special problems. When consultation or hospitalization are necessary, a phone call to the staff member likely to be most interested in the patient will help expedite service.

Patients should be warned that, contrary to what they may have heard, services at the University of Kentucky Medical Center are not free or paid for by the state (bring medical cards or insurance cards).

There are 17 bassinets for intensive care of newborns and prematures, 56 general beds for children, and 15 rooms in the Care-by-Parent Unit at the University of Kentucky Medical Center.

Problem	Who Can Help	Phone
General Pediatrics	Doane Fischer, M.D.	233-6024
Adolescent	Earl Vastbinder, M.D.	233-5874
Allergy	Kenneth L. Gerson, M.D.	233-6189
Birth Defects (Metabolic and Genetics)	C. Charlton Mabry, M.D.	233-6296
Cardiology	Jacqueline A. Noonan, M.D.	233-5494
Chest	Linda R. Walters, M.D.	233-5380
Cystic Fibrosis	Vernon L. James, M.D.	233-6141
Mental Retardation	Ingrid M. Daoud, M.D.	233-5289
Endocrine	Dorothy R. Hollingsworth, M.D.	233-6191
Hematology	Phillip Holland, M.D.	233-5694
Infectious Disease	Warren E. Wheeler, M.D.	233-5481
Newborn	Robert A. Beargie, M.D.	233-5820
Renal	Nancy H. Holland, M.D.	233-5157
Ophthalmology	J. Wirtschafter, M.D.	233-5866
Neurology	David Clark, M.D.	233-5778
Spinabifida (Mylo)	G. Brockelhurst, M.D.	233-5526
Speech and Hearing	William W. Green, M.D.	233-5840
Pediatric Surgery	Robert P. Belin, M.D.	258-2284
Unwed Mothers	Dorothy R. Hollingsworth, M.D.	233-6191

For a clinic appointment, call 233-6211 (daytime). To admit a patient to the hospital, call 233-5000 (any hour) and ask for the *Pediatric Admitting Resident.* If you cannot reach the right person—call Doctor Wheeler.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 36. This 31 year old married, white, Gr 6, Para 5, was seen initially for this pregnancy 9/21/59. LMP was 5/12/59 giving an EDC of 2/19/60. She gave a history of vaginal spotting in June, 1959, and passage of clots in July. She had always registered late in pregnancy; four of her five children were delivered at this clinic, but she never returned for postpartum examination.

On vaginal examination, 9/21/59, a large green, cauliflower like mass was seen; it was necrotic, but not friable, and completely obscured the cervical os. The lesion was biopsied and reported as an infiltrating neoplasm composed of squamous cells with markedly enlarged, irregular hyperchromatic nuclei and distinct foci of keratinization. Diagnosis: Squamous cell carcinoma of the cervix moderately differentiated.

She was advised to go to another hospital immediately for Cesarean Section and radium therapy; however, she declined, until a later time, when she could be assured that her baby would have a better chance of survival. She refused to believe the diagnosis and sought medical advice elsewhere and obtained the same advice.

She returned to the clinic 1/5/60 for treatment, where she was delivered of a living three pound, two ounce girl by cesarean section. The operative area was examined and three nodules were removed from the peritoneal cavity in the region of the bladder. The liver and spleen appeared normal. The pathological report was metastatic epidermoid carcinoma.

She was transferred to another hospital 1/15/60 for x-ray therapy; however, the tumor was felt to be radio-resistant. She was readmitted to the original hospital 2/4/60 and transfused with three pints of blood. She was discharged to her home 2/16/60 and was told to return to the outpatient clinic in one week.

On 2/21/60 her husband came to the hospital and reported the patient was having vaginal bleeding. She was examined at home, at her insistence, and found to have no excessive bleeding; however, she was quite emaciated and would take very little nourishment. She expired at her home, as was her desire, on 2/26/60. The infant girl lived.

Cause of death: Squamous cell carcinoma of cervix, associated with pregnancy.

Comment

This is not a recent case, but one from the files. The Committee classified this death as a preventable one, with the preventable factors on the part of the patient and her physician. It emphasized again the great need for family planning and conception control. Had this woman been educated to such measures and had periodic examinations, this tragic result might not have occurred.

It is noted that the infant girl survived, as did the patient's other five children. This left six children without a mother. It can not be reemphasized too frequently that carcinoma of cervix is practically a preventable disease. A history of pre-malignant lesions leading to actual invasive carcinoma of the uterus and cervix has been documented by many investigators. It is not stated in this history whether cytologic examination of the vagina and cervix had been performed on her various clinic visits for her previous children. Certainly an abnormal smear would have occurred had such been done.

By the time she presented for examination with this large mass in September of 1959, the situation was indeed grave. It has been estimated that carcinoma of the cervix progresses during pregnancy at approximately a stage per month in some cases. This again emphasizes the physician's responsibility in the follow-up of his high risk patients; and it would seem that the patient should have been pressed to immediately obtain effective and proper therapy, even though her baby had little chance of survival.

There was considerable delay between the diagnosis and the patient presenting herself for treatment. The physician should have been more aggressive in his encouraging her to have proper treatment. Current thinking by many gynecologic oncologists is that in cases of invasive carcinoma of the uterine cervix during pregnancy, radical hysterectomy and pelvic lymphadenectomy is the treatment of choice. Perhaps if this had been carried out at the time of cesarean section, the survival might have been different. It is lamented that more of an aggressive approach to the treatment of this woman was not carried out.

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.

Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.

For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan

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Doctors!

The quickest, easiest,
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Conserve your precious time and keep your cash!

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ANTACID

Your ulcer patients and others will praise it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.



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Headquarters Hotel

For

1971 Annual Meeting

September 21-23

Brief Summary of Prescribing Information— 9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

BRISTOL
BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.





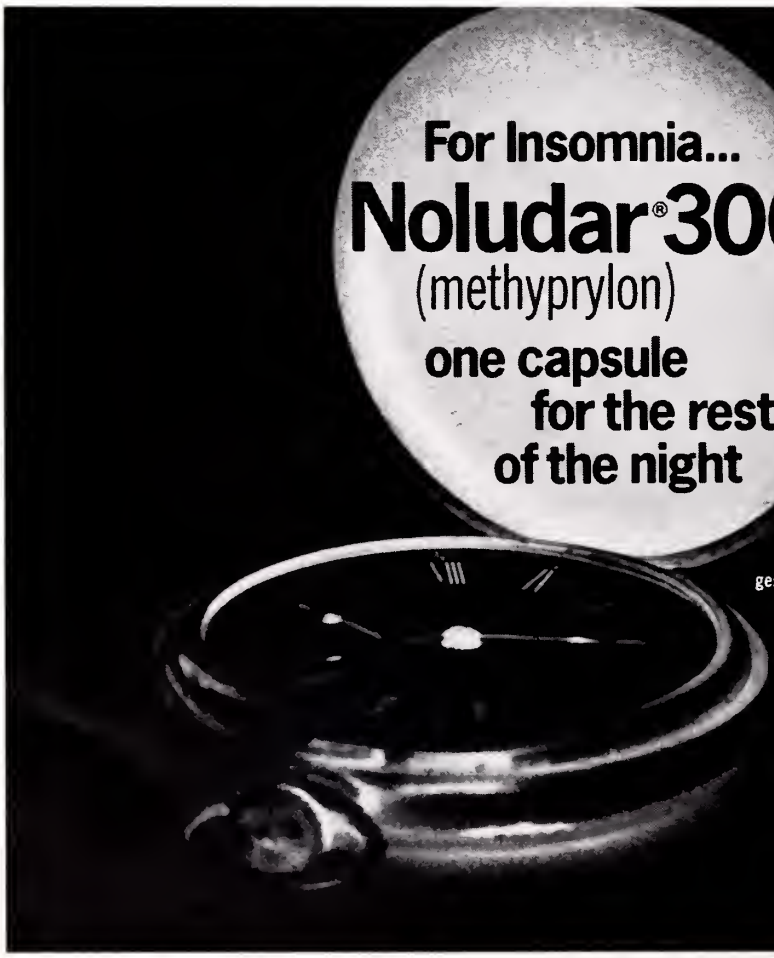
of the tetracycline-nystatin products

...none is lower priced

TETRACYCLINE HCl 25 mg. NYSTATIN 25,000 U./cc.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965

37



For Insomnia...

Noludar®300

(methyprylon)

one capsule for the rest of the night

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

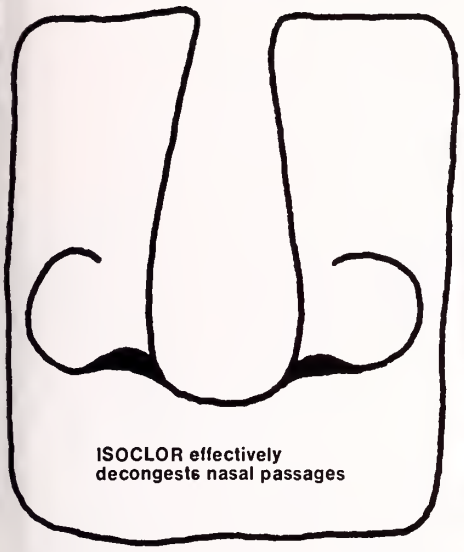
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

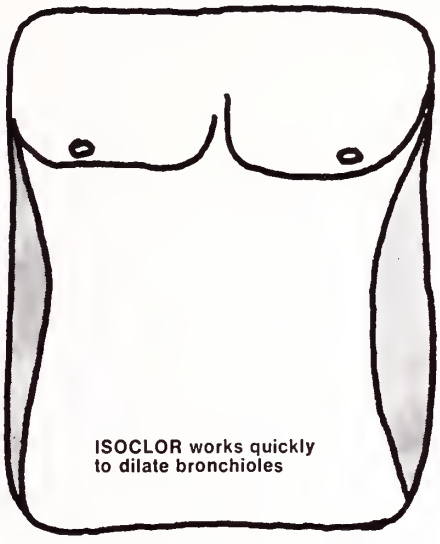
Each capsule contains 300 mg of methyprylon.

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

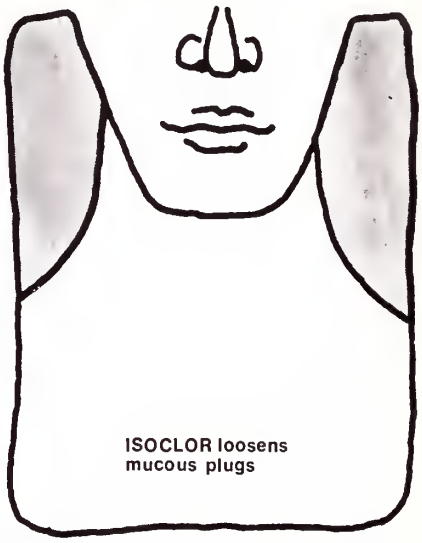
HERE ARE THE COLD FACTS:



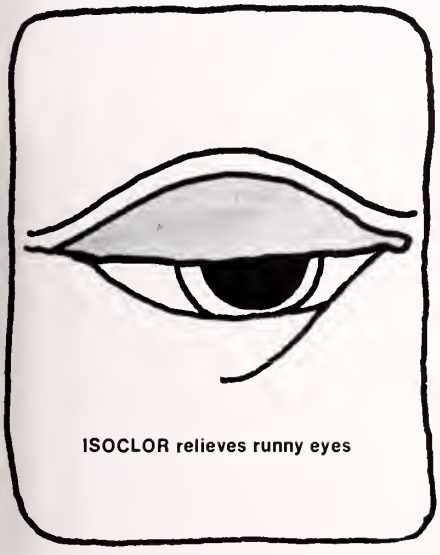
ISOCLOR effectively decongests nasal passages



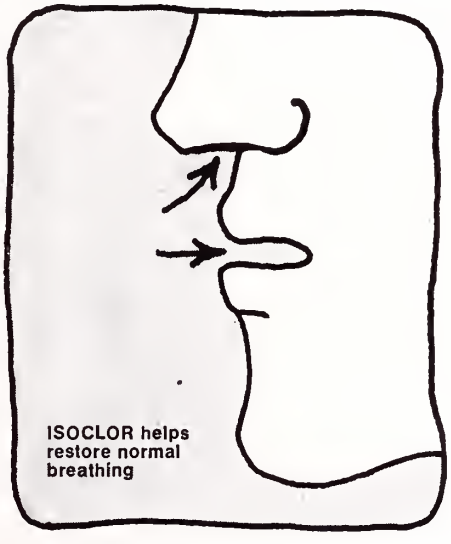
ISOCLOR works quickly to dilate bronchioles



ISOCLOR loosens mucous plugs

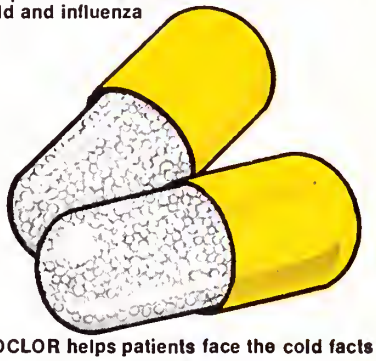


ISOCLOR relieves runny eyes



ISOCLOR helps restore normal breathing

ISOCLOR promptly and effectively combats symptomatic miseries of the common cold and influenza



ISOCLOR helps patients face the cold facts

ISOCLOR®

Isoclor provides quick, long lasting relief of respiratory congestion and discomfort brought on by common colds, influenza, and allergies. Isoclor contains chlorpheniramine maleate — one of the most potent and safest antihistamines. And pseudoephedrine HCl — a decongestant bronchodilator providing effective and long lasting relief for the entire respiratory tract. Both work to extend the range of relief.

COMPOSITION: Each tablet or 2 teaspoonfuls of liquid contains:
Chlorpheniramine Maleate.....4 mg.
Pseudoephedrine HCl.....25 mg.

Each ISOCLOR Timesule contains:

Chlorpheniramine Maleate.....10 mg.
Pseudoephedrine HCl.....65 mg.
In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For symptomatic relief of colds, hay fever, allergic conjunctivitis, perennial rhinitis of allergic origin and sinusitis. Opens nasal, sinus and bronchial passages orally.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients suffering with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100 and 1000. Liquid: 4 oz. bottles, pints, and gallons; Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

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Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1971 Annual Meeting — Kentucky Medical Association

Convention Center — **Louisville, Kentucky** — **September 21, 22, 23**

Fill Out and Mail to:

BENJAMIN B. JACKSON, M.D., Chairman

Committee on Scientific Exhibits

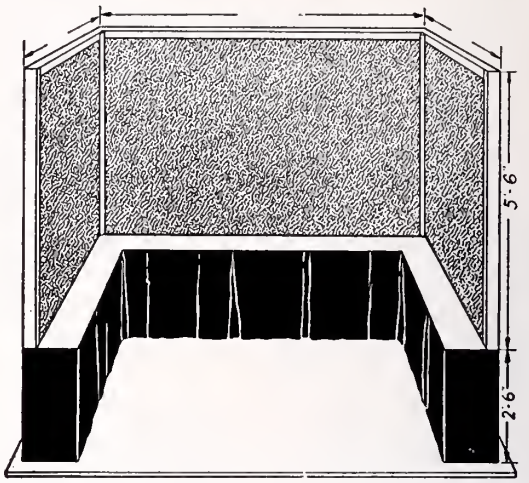
Kentucky Medical Association

3532 Ephraim McDowell Drive

Louisville, Kentucky 40205

Applications for space should be received before July 1, 1971.

Dimensions and structure of KMA Scientific booth are shown in accompanying illustration



1. Title of Exhibit:
2. Name (s) of Exhibitor (s):

 Institution (if desired):

 Mailing Address:
3. Do you have a built-in exhibit?
4. Description of Exhibit: (Attach brief description not to exceed 50 words to this blank.)
5. Exhibit will consist of the following: (check which)

 Charts and Posters.... Photographs.... Drawings.... X-rays

 Specimens.... Moulages.... Other Material. (Describe)
6. Booth Requirements:

 Amount of total wall space needed?

 Back wall?

 Shelf desired? (yes or no)
7. Indicate sources of assistance provided to you in connection with the exhibit.

8. Has this exhibit been exhibited before? If so, when & where?

Date

Signature of Applicant

The Kentucky Medical Association will provide, without cost to the exhibitor, the following: exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the Committee on Scientific Exhibits.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor, as well as cost of cards, signs, etc. which are a part of the exhibit.

View boxes, furniture, decorations, etc. may be rented, if desired, by applying to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202, who supply equipment for the KMA Annual Meeting.

Due to the shortage of space, please have your exhibit as compact as possible.

IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

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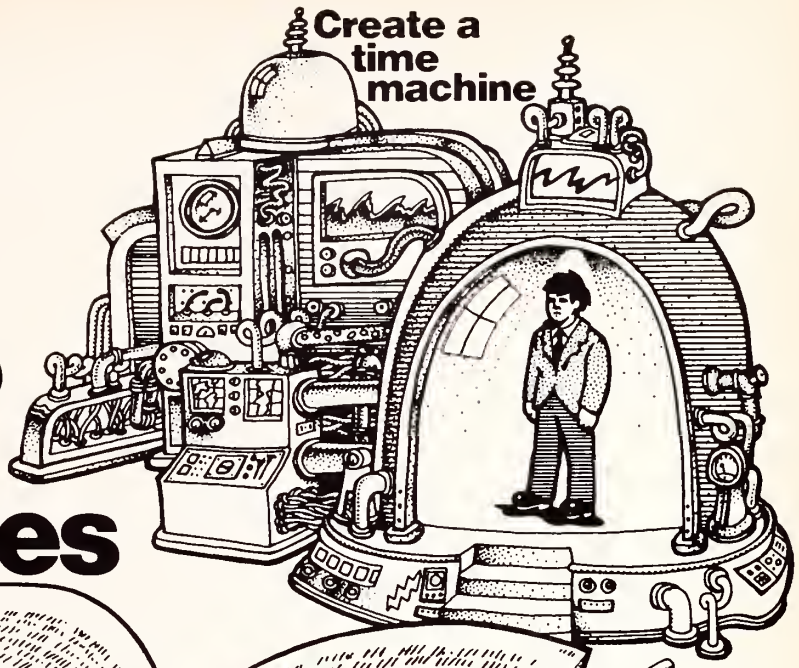
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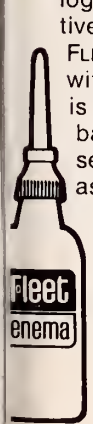


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References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B · Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964

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2/23/68
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6/11/68
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Warnings: If occlusive dressing used may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

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VOLUME 69 JUNE 1971 No. 6

Cardiac Valve Replacement at the University of Louisville

ALLAN M. LANSING, M.D., PHD., F.R.C.S. (C), F.A.C.S.*
AND JERROLD S. LOZNER, M.D.**

Louisville, Kentucky

The results of cardiac valve replacement at the University of Louisville compare very favorably with those seen at other major institutions. The series was noteworthy for short perfusion times, minimal blood requirement, and low mortality.

REPLACEMENT of a cardiac valve is necessary if the valve defect produces disabling symptoms and progressive deterioration of heart function, and the deformity cannot be repaired either because of extensive tissue loss or heavy fibrosis and calcification. The cases treated at the University of Louisville in the last two and a half years (January, 1968, to June, 1970, inclusive) were reviewed so that the mortality, morbidity, and functional result could be evaluated. This report forms the basis for selection of future cases, and acts as an index of the results to be expected for the cardiovascular service and the referring physician.

*Professor of Surgery, Chief of Cardiovascular Surgery

**Summer Research Scholar

From the Department of Surgery, University of Louisville School of Medicine, Louisville, Kentucky 40202

Case Material

One hundred and twenty-two patients underwent replacement of one or more cardiac valves in this period of time. In 43 cases, the aortic valve was replaced; in 53, the mitral; and in 26, two valves were replaced. There happened to be an exactly equal number of males and females, but in aortic valve replacements the males outnumbered the females two to one (29 to 14), and in mitral replacements the females predominated in a ratio of three to two (32 to 21).

The functional classification of the New York Heart Association was used for assessing the preoperative status: only one patient was Class II, 96 were Class III, and 25 were Class IV. This reflected our plan to consider only patients with disabling symptoms and function for valve replacement, but to operate on the Class IV patients even if they were referred in a moribund state. If the patient was a Class I or II functional candidate in whom a closed heart procedure could not be employed, operation was deferred except in one case of aortic stenosis in which the hemodynamic studies indicated a much more advanced lesion than the patient's symptomatology suggested.

The number of patients operated on each

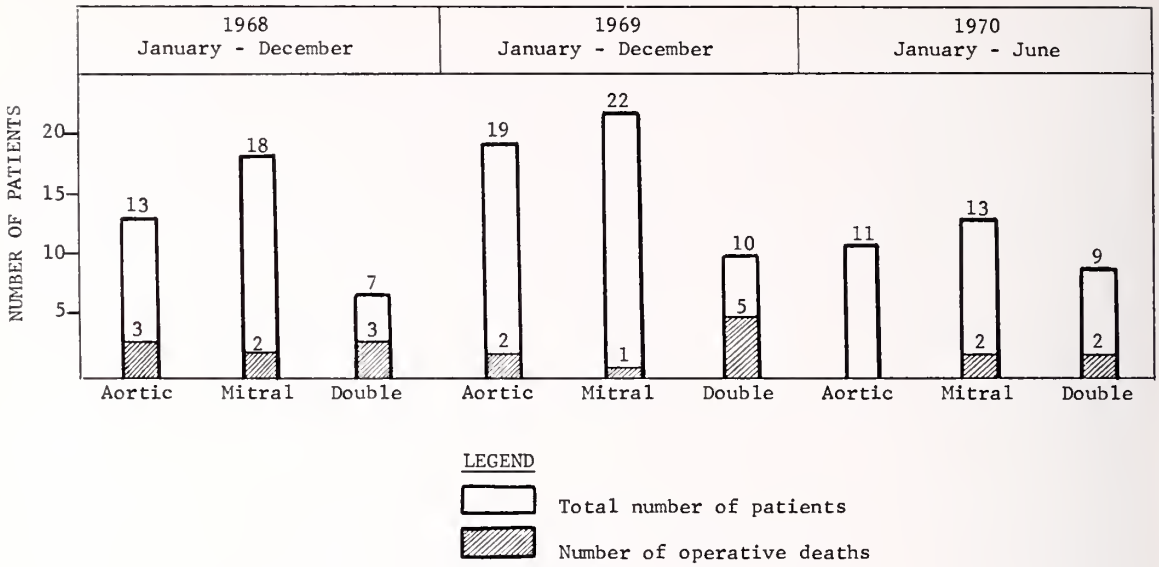


Figure 1 Operations performed and operative deaths each year.

year is indicated in Figure 1 for aortic, mitral, and double replacements; and the operative deaths are indicated in the same column. The statistics for the year of 1970 comprised only those done in the first six months, of course. The age distribution of the patients is shown in Figure 2: six patients were under 20 years of age, two were over 70, and the majority were between 40 and 60 years of age.

Previous operative procedures had been carried out in 22 of the patients, a total of 25 operations having been done. Two of the patients were operated upon for replacement of a faulty Kay-Shiley mitral disc valve, one for replacement of a malfunctioning Hufgnagel aortic prosthesis, and one to replace a leaking aortic homograft valve. All four of the original procedures were done elsewhere, since only the Starr-Edwards valve has been employed at this institution (Table I).

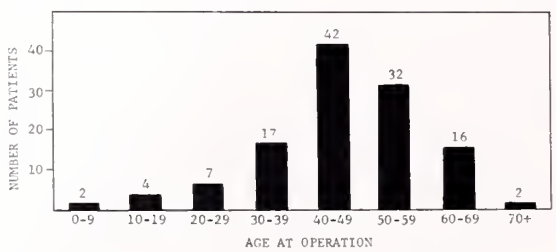


Figure 2 Age of patients at time of valve replacement.

Techniques

Standardization of the operative procedure led to greater technical facility, shorter operating times, and a lower morbidity and mortality.

TABLE I

PREVIOUS CARDIAC SURGERY
(22 patients)

Closed mitral valvotomy	18
Open mitral valvotomy	1
Open mitral replacement	2
Open aortic valvotomy	1
Open aortic replacement	3
	25

The incision most commonly employed was a midline sternotomy, although right thoracotomy has been used for isolated replacement of the mitral valve in the patient with a small left atrium.

A left-sided approach to the mitral valve has only been used in cases where closed mitral valvotomy was unsuccessful because of marked subvalvular fusion or left atrial thrombus, and the open heart procedure was then continued through the left chest approach. A roller pump with a disposable bubble oxygenator was primed with Ringer lactate solution and five per cent dextrose in water, no blood being used in the machine.

We believe that the stress on the awake patient of preparing, washing, draping, and cannulation of the femoral vessels is greater than that of skillfully administered light general anesthesia. Therefore, general anesthesia was the choice in all except one case that was started under local anesthesia; and normothermic conditions have been used throughout. Only the electrocardiogram, electroencephalogram, pupillary size, central venous pressure, and blood pressure determined by sphygmomanometer have been monitored during the operation.

In aortic valve replacement, the left coronary artery was perfused at a rate of 150-250 cc./min.; and during mitral valve replacement, the ascending aorta was cross-clamped to give ischemic cardioplegia. If more than 20 minutes were required for mitral valve replacement, the aortic clamp was released for a few minutes and then reapplied while the procedure was completed.

Throughout this period of study, the Starr-Edwards ball valve has been used in both the mitral and aortic positions; and in the last six months, the cloth-covered model with a composite seat has been employed. The reliability of this prosthesis, the excellent follow-up data available from the manufacturer, and the world-wide experience that has been gained with it have made it the artificial valve of choice.

In the postoperative period, the electrocardiogram, cuff blood pressure, central venous pressure, temperature, chest tube drainage, urinary output, and respiratory rate were monitored. The patient was ventilated through the endotracheal tube until he awakened fully and was able to maintain his own respiration at a rate of less than 30 per minute. If he had severe pumonary disease, advanced myocardial failure, or severe pulmonary hypertension, he was ventilated for 12 to 18 hours before being weaned off the respirator.

Tracheotomy has been performed electively only one time; although, occasionally, ventilation through the endotracheal tube for 48 hours was necessary. Monitoring of intra-arterial pressure or blood gases has not been employed. Temporary epicardial pacemaker electrodes have been implanted at the time of operation in a few patients who had a slow ventricular rhythm, particularly when it was associated with atrial fibrillation and weak cardiac contractions; and a slow Isuprel* drip in a very dilute concentration (0.4 mg./500 cc.) has been used freely in similar situations. Episodes of frequent ventricular premature contractions have been treated by injection of a lidocaine bolus followed, if necessary, by a continuous drip, and also by infusion of potassium chloride solutions.

Isuprel—Isopropylnorepinephrine, Winthrop.

Results

The time on the heart-lung machine is indicated in Table II. Aortic valve replacements were carried out in an average time of 66 minutes, with 29 minutes of coronary perfusion time. The range was from 47 to 120 minutes, the longest being in a patient who had very poor cardiac contraction and required prolonged support after the operation had been completed. Mitral valve replacement was performed in a mean time of 48 minutes, and the aorta was cross-clamped for an average of 24 minutes. The fastest mitral valve replacement required only 28 minutes of cardiac bypass. Double valve replacement required an average time of 95 minutes and ranged from 60 to 175 minutes. Our present operative time is even shorter, as the team works together regularly.

TABLE II

TIME ON PUMP

	Mean	Range
Aortic Replacement	66 min.	47-120 min.
Coronary Perfusion Time	29 min.	17-36 min.
Mitral Replacement	48 min.	28-78 min.
Coronary Ischemia Time	24 min.	15-37 min.
Double Valve Replacement	95 min.	60-175 min.

Equally satisfying was the amount of blood

TABLE III

BLOOD TRANSFUSION

	Mean	No blood
Mitral replacement	400 cc	45%
Aortic replacement	550 cc	28%
Double valve	750 cc	25%

required for the open heart procedures (Table III). Mitral valve replacement required an average of only 400 cc. of blood in the operating room, the heart-lung machine, and the immediate postoperative period. In fact, 45 per cent of the patients received no blood at all during their hospital stay. Aortic valve replacement required an average of 550 cc., and 28 per cent of the patients received no transfusions. Double valve replacement required only an average of 750 cc. of blood, and a surprising 25 per cent of these patients required no transfusion during their hospital stay!

The mortality rates are listed in Table IV. Operative deaths include all patients who died in the hospital; late deaths are those that occurred after discharge from hospital and represent a follow-up period of four months to two years and ten months. Replacement of a single valve, either aortic or mitral, carried an operate mortality of about ten per cent, and a late mortality of about five per cent, giving a total mortality rate for aortic valves of 16 per cent, and for mitral valves of 13 per cent during the whole period. The mortality rate for double valve replacement was quite high and, over the period, was 36 per cent. In the last six months, however, nine double valves have been replaced with only two deaths (22 per cent). These deaths include *three patients that developed acute pulmonary edema in the operating room before operation, two patients who had cardiac arrest before or during induction of anesthesia and required external cardiac massage before the procedure was started,* and *two other patients who developed dilated pupils and complete absence of peripheral pulses before the pump procedure.*

Despite these bad risk cases, which perhaps should not have been accepted, the operation was proceeded with in all patients because of the desperate situation and bleak prognosis without operation. Earlier referral and operative intervention would likely have prevented these deaths.

The complications that occurred in the operating room are listed in Table V. Forty-eight serious problems were encountered; but the major causes of death were aortic dissection, poor myocardial contractility, and preoperative cardiac arrest. Ventricular arrhythmias were very frequent and, at times, quite threatening, but led to only two deaths. Poor blood clotting was encountered on only two occasions, a tribute to the technique of hemodilution with no blood in the pump prime and

TABLE V

OPERATING ROOM COMPLICATIONS

	No.	Died
Aortic dissection	3	2
Ventricular fibrillation	17	2
Other ventricular arrhythmia	13	0
Poor contractility	5	3
Pulmonary embolus	1	1
Preop cardiac arrest	2	2
Pulmonary edema	3	1
Poor clotting	2	0
Ventricular laceration	2	0
TOTAL:	48	11

TABLE IV

RESULTS OF CARDIAC VALVE REPLACEMENTS

University of Louisville

JANUARY, 1968 — JUNE, 1970

	# patients	# op. deaths	% op. mort.	# late deaths	% late mort.	Total
Aortic valve	43	5	11.6	2	4.6	16.2%
Mitral valve	53	5	9.4	2	3.8	13.2%
Aortic and mitral	13	6	46.2	1	7.7	53.9%
Mitral and tricuspid	11	3	27.3	0	0	27.3%
Aortic and tricuspid	1	0	0	0	0	0
Tricuspid	1	1	100.0	0	0	100.0%
TOTALS	122	20	16.4	5	4.1	20.5%

the avoidance of blood transfusion during the operation; neither of these patients expired.

The causes of hospital and late mortality are listed in Table VI. The major cause of

TABLE VI

CAUSES OF MORTALITY

In Hospital	
Operating room complications	11
Arrhythmia	3
Subacute bacterial endocarditis	2
Congestive failure	1
Low cardiac output	1
Respiratory insufficiency	1
Cerebral edema	1
Late Deaths	
Anticoagulant therapy	1
Arrhythmia	2
Congestive failure	2

death was a serious complication that arose in the operating room; but in the postoperative period three deaths occurred from arrhythmias, two from bacterial endocarditis, and one each from resistant congestive failure, low cardiac output, respiratory insufficiency, and cerebral edema. One of the late deaths was caused by cerebral hemorrhage resulting from improper control of the anticoagulant therapy, and two occurred as a result of continuing ventricular arrhythmia which had been present preoperatively. Two other patients died late as a result of intractable congestive heart failure and low cardiac output; these cases represent advanced myocardial disease that was not relieved by correction of the mechanical problem by valve replacement.

Nonfatal postoperative complications were also infrequent (Table VII). Eight cerebral emboli were encountered, of which three probably occurred in the operating room as a result of air embolism or embolism of calcium from a badly damaged aortic valve. Late emboli were recognized in only four per cent of the cases; although quite likely many more occurred, but the transient nature of the dysfunction was ignored by the patient or physician.

Severe postoperative psychosis was encountered three times and took the form of marked depression. However, a temporary depressive state occurred frequently if the patient were kept in the intensive care unit for a longer than usual period of two to four days, particularly if his condition were checked so frequently that he got very little rest. Under these conditions, we treated the patient by heavy sedation and, if possible, moved him to a ward where the nursing and medical care were less vigorous, but peace and quiet were more available.

Four patients suffered from ventricular fibrillation in the intensive care unit or on the ward and were resuscitated. One of these patients had *two episodes of ventricular fibrillation on the ward and, in each case, was resuscitated by the hospital cardiac arrest team,* a fine tribute to their outstanding skill and speed! In only four patients, was reoperation required

TABLE VII

NONFATAL POSTOPERATIVE COMPLICATIONS

Cerebral embolus:	
In operating room	3
Late	5
Psychosis	3
Ventricular fibrillation	4
Respiratory requiring tracheotomy	2
Hemorrhage requiring re-operation	4
Post-cardiotomy syndrome	4
Incisional hematoma	2
Cardiac tamponade	1

for continuing hemorrhage from the thoracotomy or midline sternotomy; and cardiac tamponade requiring operation was only encountered once.

A significant wound infection was not present in any of the patients, but in two of them a hematoma had to be drained from one of the incisions. The post-cardiotomy syndrome requiring steroid therapy was encountered four times. Hepatitis has not been seen, probably because little blood was required, and all of it came from the American Red Cross volunteer donor program.

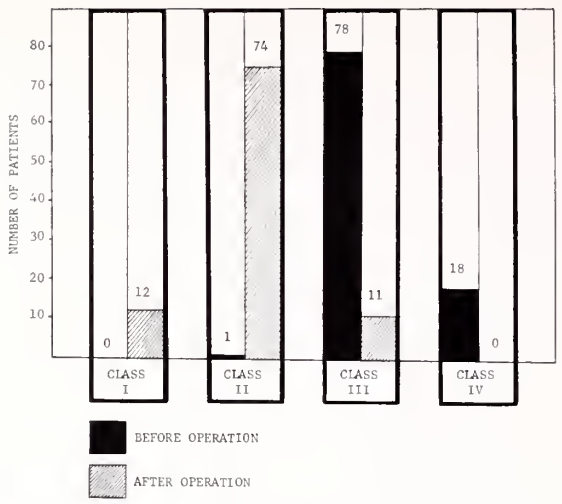


Figure 3 Functional classification of surviving patients, before and after valve replacement.

The functional classification of the 97 survivors is shown in Figure 3, along with the preoperative status of the same group. Only one patient was Class II before operation, and 80 per cent were Class III. Postoperatively, most patients (75 per cent) were Class II; and 12 were Class I. These figures apply to their status at the time of their most recent checkup, usually one to three months before.

Discussion

The results of cardiac valve replacement as outlined here are quite acceptable. For comparison, Table VIII lists the operative mortality at the University of Louisville and that of a cooperative study conducted during the same period at six major institutions throughout the nation.[1] Mitral valve replacement carried an operative mortality two and one-half times greater in these centers, and aortic replacement was almost twice as risky. Double valve replacements locally and in this group had a comparable risk, although in 1970 the local operative mortality dropped to about 20 per cent.

TABLE VIII

COMPARATIVE OPERATIVE MORTALITY

	University of Louisville	Co-op. Study*
Mitral replacement	9.4%	23.1%
Aortic replacement	11.6%	20.1%
Double valve	36.0%	44.0%

*Duke University; National Heart Institute; Presbyterian Hospital, San Francisco; Presbyterian-St. Luke's Hospital, Chicago; University of Chicago Hospitals; Yale University.

What factors were responsible for these satisfying results? Case selection itself was not significant, since only Class III or IV cardiac patients were operated upon: two patients had a cardiac arrest in the operating room before the procedure was instituted, two had no peripheral pulse and dilated pupils, and three more were operated upon in acute pulmonary edema. Two patients were on chronic hemodialysis when their valves were replaced: one was a Jehovah's Witness and one was an 18-pound child who sat up in an oxygen tent for three weeks before operation.

Several other patients showed extremely low cardiac output and hypotension before the operation was started because of inherent tachycardia or myocardial depression caused by the anesthetic agent; but in each case, the procedure was undertaken because the moribund state of the patient permitted no alternative. Therefore, the major factors leading to the good results are believed to be technical ones and excellent supportive care in the postoperative period.

As far as technique is concerned, the short operating time and minimal period of perfusion undoubtedly led to the speedy recovery of most patients and to the survival of some borderline patients. Skillful anesthesiologists permitted us to use general anesthesia throughout all but one of our cases without fear of dire effects. Another major contributing factor was the use of hemodilution with no blood in the pump oxygenator. Only one unit of blood was used for the loss during the average single valve replacement; and as has been noted, 45 per cent of the mitral replacements and 28 per cent of the aortic valves required no blood at all. This led to a great diminution in postoperative bleeding, hypotension, acidosis, and poor peripheral perfusion. In turn, the absence of these factors aided the recovery of the heart from the trauma of the operation.

In spite of these factors, however, the survival rate would not have been nearly as good without the outstanding work of the nursing service in the intensive care unit. On at least three occasions, ventricular fibrillation was treated by the nurses; and on two more occasions, a patient was resuscitated on one of

the wards of the hospital when she collapsed with ventricular fibrillation and was revived by the hospital cardiac arrest team. Naturally, the skill and devoted attention of the resident staff and the fellows in cardiovascular surgery were also very important in the ultimate successful outcome of most of the procedures.

Peripheral embolism following prosthetic valve replacement has been infrequent in this period of time. Late cerebral emboli with residual neurological deficit have only been seen in five patients (four per cent). It is quite possible that minor emboli to the extremities, abdominal viscera or brain may have been overlooked because they only caused transient pain, lightheadedness, or weakness that was ignored by the patient or physician. Anticoagulant therapy has been continued in most of the patients, but none of the children is on anticoagulants because of the risk of major trauma in such active individuals. Similarly, patients who are uncooperative and unreliable, or those in whom regulation of the prothrombin time is difficult, are not maintained on anticoagulant therapy. This group includes a significant proportion of the indigent patients operated upon from Louisville General Hospital.

Infection has fortunately been an infrequent occurrence in this series, and significant wound infection has not occurred. However, two patients developed bacterial endocarditis and both of them eventually died in spite of reoperation with replacement of the valve. In each case, a staphylococcus aureus was the responsible agent. Prophylactic antibiotic therapy includes methicillin orally preoperatively for one day and postoperatively for two to four weeks.

Infectious hepatitis has not occurred in any of the patients, probably because only a minimum amount of blood has been used and all of this has come from volunteer donors through the American Red Cross.

Although the operative technique has reduced the immediate fatalities almost to a minimum, the major cause of death in the immediate postoperative period and later is still ventricular arrhythmia that has usually been present before operation. Supplemental oral potassium therapy is administered before operation to patients who have been receiving heavy doses of diuretics; and potassium is given intravenously to these cases in the postoperative period, even though the serum potassium may be recorded as normal. The rationale is the greater tendency for digitalis toxicity to occur immediately after hemodilution perfusion, and studies have demonstrated that the total level of potassium can be quite low in spite of a normal serum level. In spite of our efforts, however, five of the deaths were caused by ventricular arrhythmias in the postoperative period; and four other patients were resusciated from ventricular fibrillation. Thus, nine patients had a life-threatening ventricular arrhythmia, which makes this the most serious problem that was encountered after the patient left the operating room.

Summary

One hundred and twenty-two patients underwent cardiac valve replacement at the University of Louisville in the two and one-half year period from January, 1968, to June, 1970. The operative mortality compares very favorably with that seen at major institutions around the country. The series was noteworthy for short perfusion times and minimal blood requirement. Major causes of death were complications that arose in the operating room, postoperative ventricular arrhythmias, and continuing poor myocardial function in spite of mechanical improvement in the valve function.

The functional status in the surviving patients generally moved up one class. Thus, the majority (80 per cent) of the patients were Class III preoperatively, while 75 per cent were Class II afterwards. They were able, therefore, to carry out their normal activities without symptoms or restrictions after operation, a rewarding state for most of the patients.

Acknowledgements

This project was supported in part by U.S.P.H.S. Training Grant #5T12HE05804. All operations were performed at Jewish Hospital, Louisville; and the outstanding support of its administration, medical, and nursing staff is gratefully acknowledged. The project was also supported by the Louisville Medical Research Foundation.

Reference

1. Kittle, C. F. et al: *Circulation 39*: Supp. No. 1, 169-171, 1969.

1971 Student Research Day University of Kentucky School of Medicine

THE Journal is pleased to publish abstracts of the 12 papers chosen for presentation on Student Research Day at the University of Kentucky Medical Center. Judging of the papers presented was based on scientific merit and quality of the presentations.

A panel of judges composed of clinical, basic sciences, and preclinical faculty chose the following for awards: Sidney F. Hopkins, Jr., first place; Robert A. Biddle, second place; and David L. Gunn, third place.

The following abstracts are of the three award winning papers. The other nine abstracts will appear in the July *Journal.*

Changes in Myocardial Contractile Properties with Age

SIDNEY F. HOPKINS, JR. (First Place)

THE studies of Mott (*Brit. Med. Bull.,* 1966) showed no change in circulation time with postnatal growth in rats. Since the length of the circulatory system and the cardiac output are increasing, the overall flow velocity must increase as development progresses. There is only indirect evidence that a change in peripheral resistance compensates for the added energy loss created by the increased length.

We postulated that intrinsic changes in the myocardium may be associated with the rapid circulatory alterations occurring during postnatal development in the rat. Both histological and isolated perfusion techniques were used to study changes in developing myocardium.

Histological studies of the left ventricle (L.V.) showed that, at birth, the myofibrils and mitochondria were totally disoriented, but within 16 to 20 days after birth, structural organization is very similar to that found in the adult.

Functional evaluation of the perfused L.V. myocardium, using the variables of isometric pressure, tension, dp/dt, and integrated isometric tension, revealed a significant performance decrement in the ten day old heart compared to the adult. The 16 and 20 day old hearts were functionally similar to the adult. Changes in function were related to age rather than L.V. mass.

We conclude that there is a direct relationship between functional properties and the anatomical development of rat myocardium. Studies of the postnatal circulation must include analysis of changes in myocardial structural and functional properties (in addition to changes in pressure, heart rate, flow, ventricular mass, and peripheral resistance).

The Effects of Cryptorchidism on the Rat Testicular Lactate Dehydrogenase Isoenzymes

Robert A. Biddle (Second Place)

THE effects of cryptorchidism on the two testicular specific lactate dehydrogenase (LDH) isoenzymes, beyond the five normally found in most tissues, were examined at two, four, six, eight and ten days following surgery. After unilateral cryptorchidism was performed in 25 sexually mature rats by suturing the testis to the abdominal wall, the testicular LDH isoenzymes disappear, as visualized electrophoretically after about the sixth day. Similar surgery in 25 immature rats (age three-28 days) prevents the appearance of the testicular specific LDH isoenzymes, which normally are visualized at about day 35-40 after birth.

In a group of 13 sexually mature animals, the testis was placed in the abdominal cavity, where it remained for six-38 days. The testis was then surgically permitted to redescend into the scrotal sac and the testicular LDH isoenzymes visualized. In eight of these animals, the testicular enzymes reappeared,

provided the testis was left redescended for at least 14 days. In 18 sexually immature animals operated similarly, only one with redescended testis showed a reappearance of the testicular LDH isoenzymes.

Histological studies of the cryptorchid testis indicate a rapid degeneration of the seminiferous tubules and, by day six, a cessation of spermatogenesis. The sertoli and interstitial cell population, however, remain relatively constant. With redescention, there appears a gradual regeneration of the tubules, and by day 14, a large number of primary and secondary spermatocytes and a small number of spermatozoa can be seen. The weight of the sexually mature cryptorchid testis decreases about 50 per cent after the sixth day, but remains constant after the eighth day post-surgery.

These experiments indicate that the two rat testicular specific LDH isoenzymes, which are synthesized at about the time of activation of spermatogenesis, disappear when the testis is placed in the abdominal cavity and reappear if the testis is permitted to remain redescended for at least 14 days.

Although the role of the testicular LDH isoenzymes in the metabolism of mature spermatozoa is not established, they appear to be essential for the spermatogenic event.

The Use of Carbodiimide as a Coupling Agent In the Passive Hemagglutination Test†

David L. Gunn (Third Place)

PASSIVE hemagglutination is an extremely sensitive technique for detecting antibody to a variety of antigens. This is a report on the use of a carbodiimide (1-ethyl-3-[3-dimethylamino propyl] carbodiimide) to couple soluble protein antigens to sheep red blood cells (sRBC) for use in the passive hemagglutination test.

Varying concentrations of bovine serum albumin (BSA) were reacted with sRBC in the presence of carbodiimide to effect coupling. These sensitized sRBC were tested with antisera obtained from rabbits undergoing primary and secondary antibody responses to BSA. The titers of these antisera were determined using the carbodiimide sensitized sRBC.

For comparison, the titers were also determined using the tannic acid passive hemagglutination method. With primary antisera, optimal titers were obtained when at least 50 mg BSA/ml were used to sensitize sRBC. This is in contrast to data obtained with secondary antisera. In this case, sRBC sensitized with 5 to 10 mg BSA/ml gave optimal titers.

There was a relationship between the titer and the concentration of BSA used to sensitize sRBC when primary antisera was employed in the test. Increasing the concentration of BSA used to sensitize sRBC resulted in cells which could detect progressively greater amounts of antibody. This suggests that this procedure is measuring, in part, the avidity of the antibody.

Separation of the primary antisera into IgM and IgG antibody fractions was performed by gel filtration on a Sephadex G-200 column. When these antibody fractions were tested with sRBC sensitized with varying concentrations of BSA, it was demonstrated that IgM could agglutinate sRBC sensitized with much smaller amounts of BSA than could IgG. These results with IgG primary antibody are in contrast to those found with secondary IgG antibody where the optimal concentration of BSA needed for coupling was 5 to 10 mg/ml. This again suggested that the carbodiimide technique is measuring the avidity of antibody.

The passive hemagglutination technique employing carbodiimide as a coupling agent proved as sensitive in detecting antibody as did the tannic acid method and much easier to perform. In addition, sRBC sensitized by the carbodiimide technique were stable for as long as 47 days.

†Study performed during summer fellowship supported by the Kentucky Arthritis and Rheumatism Foundation

Cervical Lymphadenitis Caused by Atypical Mycobacterium

T. H. Biggs, M.D.*

London, Kentucky

Childhood scrofula will not always respond to chemotherapy with first line drugs. Excision is often needed. Some of the cases are caused by atypical mycobacteria. To determine this, specialized laboratory techniques are required.

D. C., age 8, resident of Pulaski County, Kentucky, was seen on June 16, 1970, because of enlarged lymph nodes on the left side of the neck. The swelling had been present for about two months. The child had been drinking unpasteurized milk. "Strep throat" had occurred in March, 1970. Mumps occurred in infancy. The child had not been in any known close contact with pulmonary tuberculosis.

Physical examination on June 16 revealed two abnormal glands in the left anterior cervical chain. The higher one was the larger; they were not tender or red; there was slight fluctuation apparent. Body weight was 47 pounds; temperature was 97.8. The patient was started on Isoniazid, 300 mgs. daily and Sodium PAS, 6 Gms. daily. PPD 5TU was applied and produced 8 mm. reaction. On July 14, 1970, the area of adenitis was worse. The skin was very red and there was an area of fluctuation several cm in diameter.

Four cc of pink pus was aspirated and cultured for Mycobacteria. A stain for sulfur granules was negative. On July 17, two more cc was aspirated.

On July 24 the child was unimproved. He was referred to the Pediatric Surgeon and admitted at University Hospital. His histoplasmin skin test was strongly positive and his skin test with PPD Battey was 10 mm. The nodes were excised in toto; and the incision healed. He continued to receive antituberculous medication for a brief period.

The organism cultured from the preoperative, July 17, aspiration was *Mycobacterium scrofulaceum*. This is an atypical mycobacterium of Group II, scotochromogens, and subgroup *Scrofulaceum*. Sensitivity tests were eventually done, and the bacilli were 100 per cent resistant to Isoniazed, Kanamycin, Viomycin, and Ethambutol. They had moderate resistance to Streptomycin, marked resistance to PAS. They were sensitive to Cycloserine and Ethionamide.

The pus from the first aspiration was cultured on Lowenstein-Jensen media and Middlebrook 7H-10 media. Culture from the second aspiration was inoculated into Middlebrook 7H-9 broth, which is an enriched media. The cultures on solid media from the first aspiration never did show any growth. Smears made from the Middlebrook broth, 7H-9, were positive at the end of ten days; the organisms were then transferred to the solid media, which showed numerous, very small colonies at the end of six weeks. These were grossly atypical. They grew slowly, and after a few more weeks, were easier to visualize. They were then sent to the State Department of Health for complete identification and sensitivity studies.

The exact organism causing a case of cervical adenitis may be missed if pus from the nodes is not specially handled by a technician having experience with Mycobacteria, and using the enriched 7H-9 broth. Likewise, the solid cultures may be very slow in turning positive

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and should be held longer than the usual six weeks.

In retrospect, sensitivity studies reveal why the Isoniazid and PAS did not produce a good result. The majority of cases of scrofula are due to ordinary Mycobacterium tuberculosis, but a minor percentage of cases will be due to atypical organisms.[1,2,3,4] In cases where cultures are not available for exact etiology determination, combined triple chemotherapy would seem to have a better chance of being helpful than relying on a more simple combination, or using Isoniazid alone. Surgery should not be delayed if the patient is not doing well. Aspiration of fluctuant areas is indicated for diagnosis and for preventing rupture of an abscess while the case is being scheduled for surgery.

Weekly positive skin tests from the PPD 5TU test are commonly found in cases of atypical infection. Reactions from 6 to 9 or 10 mm. should make one suspicious of an atypical Mycobacterial infection, whereas reactions from 10 to 20 mm. would be the common finding when regular tuberculosis organisms are the causative agent. There are exceptions to both rules.

References

1. Prissick, F. H., and Masson, A. M. Canad. *Med. Assn. J.* 75:798, 1956.
2. Davis, S. D., and Comstock, G. W.: *J. Pediatrics* 58:771, 1961.
3. Wayne, L. G.: *Amer. Rev. Resp. Dis.*, 86:651, 1962.
4. Wolinsky, E., and Rynearson, T.: *Ann. Meet. Med. Abs. Nat. Tuberculosis Association,* May 22-25, 1966, p. 30.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in the Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

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Medical Progress

Chronic Active Hepatitis†

C. Thomas Nuzum, M.D., and Bruce A. Phillips, Jr., M.D.

This is a review of the syndrome of chronic active hepatitis and the presentation of eleven cases with the syndrome.

CHRONIC active hepatitis is a syndrome whose features are given in its name.[1] *Chronicity* means an illness of at least six months duration, with such findings as palmar erythema, spider nevi, splenomegaly, high gamma globulin, low albumin, prolonged prothrombin time, and some degree of hepatic fibrosis. *Activity* is evident in episodes of anorexia, fatigue, mild fever, jaundice, enlarged tender liver, and elevated serum transaminases associated with focal hepatic necrosis and inflammation. The diagnosis is made by recognizing signs of both chronic liver disease and acute hepatitis in the same patient, excluding recurrent alcohol or drug toxicity.

Early descriptions of the syndrome in young women with rashes and positive LE preps resulted in the term "lupoid hepatitis." This name was dropped because no pathophysiologic connection between lupus erythematosis and chronic active hepatitis was found. Women do predominate (4:1), and most cases are diagnosed between ten and 35 years of age, resulting in terms such as "aggressive hepatitis of young women" or "active juvenile cirrhosis."

Associated inflammatory or endocrine disorders are more prevalent in chronic active hepatitis than in other liver diseases. Twenty per cent of patients have migratory arthritis; 20 per cent have rashes; ten per cent have ulcerative colitis and another 30 per cent have chronic diarrhea; five per cent have pleurisy and/or pericarditis; five per cent have glomerulonephritis; and a few have thyroiditis. Amenorrhea is common, often with hirsutism, cushingoid facies, and pigmented striae. In addition to LE cells in 15-20 per cent, many have rheumatoid factor and antinuclear antibodies. Some patients show the antibodies to smooth muscle associated with post-necrotic cirrhosis; some have the antimitochondrial antibodies found in primary biliary cirrhosis. Chronic active hepatitis, post-necrotic cirrhosis, and primary biliary cirrhosis are the "auto-immune" liver diseases. Their victims also share a high incidence of dry mouth and dry eyes;[2] this "sicca complex," due to lymphoid infiltration of salivary and lacrimal glands, is called Sjogren's syndrome when associated with rheumatoid arthritis.

Mortality is greatest in the first two years, with extensive liver necrosis causing progressive jaundice, clotting defects, renal insufficiency, and coma. Except for a longer course, these patients are similar to those dying of "submassive necrosis" in viral hepatitis. Some patients smolder for years without jaundice. In 40 per cent, the process becomes inactive with a shrunken scarred liver. They may have long asymptomatic periods before developing ascites, varices, and hypersplenism. Such patients probably form a large portion of those found to have cirrhosis without *known* prior liver disease, the coarsely nodular cirrhosis called "post-necrotic" in this country or "cryptogenic" in Britain.

Liver biopsy is important in diagnosing chronic active hepatitis; like the clinical syndrome, it should show both acute and chronic

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disease. Parenchymal degeneration and necrosis is similar to the histology of viral hepatitis, but is periportal and perilobular rather than centrilobular. Periportal infiltration with lymphocytes and plasma cells gave the syndrome another name, "plasma cell hepatitis." Fibrous strands extend from portal tracts and interlobular septa to surround clusters of parenchymal cells. Presumably, this fibrous proliferation, and parenchymal collapse with liver cell necrosis, eventually yield the broad scars of post-necrotic cirrhosis.

Clinically and pathologically the syndrome occupies the middle ground between viral hepatitis and post-necrotic cirrhosis. It must be distinguished from simple persistent hepatitis, when liver dysfunction, even mild jaundice, continue for years without signs of hepatic insufficiency (spiders, hypoalbuminemia, etc.) and without fibrosis. Subacute hepatic necrosis is a mixed biopsy picture, similar to chronic active hepatitis. Klatskin noted that among patients with acute viral hepatitis those with only parenchymal changes have no sequelae (except rarely a prolonged mild illness), while those with subacute necrosis have a 20 per cent mortality from hepatitis and a 30 per cent incidence of cirrhosis.[3] Many of these patients, after six months of illness, could easily be diagnosed as chronic active hepatitis. Pericholangitis and primary biliary cirrhosis may present similar extrahepatic findings and serology, but usually are distinguished by cholestasis (pruritus, elevated alkaline phosphatase) and biopsy picture.

The cause is unknown. A 20 per cent incidence of Australia antigen suggests a relation to long-incubation viral hepatitis (serum hepatitis). Chronic active hepatitis was diagnosed in an antigen-positive blood donor responsible for several cases of acute hepatitis. Seventy-four per cent of Klatskin's patients with subacute necrosis were antigen-positive, but this incidence may be higher because the antigen tests are more often positive early than late in the course of hepatitis. Other serologic abnormalities and multisystem involvement are tantalizing, but merely relate the liver syndrome to equally mysterious disorders.

Treatment seems as ineffectual as in most liver disease. Steroids and immunosuppressive drugs make the patient feel better and improve his liver function tests. In controlled trial, steroids reduced the high mortality of the first two years;[4] but the ultimate outcome, including cirrhosis and a 30-40 per cent five year mortality, appears unchanged. It seems possible to achieve the same anti-inflammatory effect with lower doses of steroids by adding small doses of azathioprine (Imuran).

The prognosis is worse in patients whose illness starts like acute hepatitis and progresses to liver failure within a year, but supportive care is vital because episodes of deep jaundice and encephalopathy often remit. Activity and rest can be guided by the patient's symptoms, with caution when transaminase or bilirubin rises. The course of chronic active hepatitis is not influenced by extra-hepatic disorders such as arthritis and LE cells.

We include data from a series of cases of chronic active hepatitis seen at this institution (Table 1). The sample is too small to correlate with larger studies, but does illustrate both the

TABLE 1

ELEVEN CASES OF CHRONIC ACTIVE HEPATITIS

PATIENT	AGE OF ONSET	SEX	DURATION OF ILLNESS	STATUS	TISSUE DIAGNOSIS
P.L.	16	F	14 months	Alive	Chronic active hepatitis
D.C.	16	F	44 months	Alive	Chronic active hepatitis
R.B.	16	M	20 months	Alive	Chronic active hepatitis
E.B.	44	F	8 months	*	Chronic active hepatitis
L.S.	19	M	20 mnnths	Alive	Chronic active hepatitis
D.J.	16	M	60 months	Alive	None
E.M.	4	F	32 months	Alive	Active post-necrotic cirrhosis
L.B.	21	F	9 months	Dead	Post-necrotic cirrhosis
J.H.	25	M	144 months	Dead	Active post-necrotic cirrhosis
S.L.	11	F	9 months	Dead	Active post-necrotic cirrhosis
S.N.	20	M	96 months	Dead	Post-necrotic cirrhosis

Identifying data for eleven cases of chronic active hepatitis treated in the University of Kentucky Medical Center.

* Lost to follow-up.

chronicity and activity of the syndrome. Five cases showed typical biopsy findings of chronic active hepatitis, while five others showed progression of disease with increased fibrosis.

TABLE II

CLINICAL FINDINGS

	NUMBER OF CASES
Activity:	
Anorexia	8
Nausea	7
Hepatomegaly	8
Jaundice	9
Elevated bilirubin	10
SGOT>200	10
Chronicity:	
Spider nevi	2
Palmar erythema	4
Ascites	3
Splenomegaly	6
Albumen<3.5 gm%	4
Globulin>4.0 gm%	7
Prothrombin time>14 sec.	7
Associated findings:	
Rashes	4
Arthralgias	2
Endocrine changes	3
Positive LE prep	3
Positive Au Agn	2
Positive ANA	1

Clinical Findings in chronic active hepatitis.

The clinical features of the syndrome in our series are seen in Table II. All but one of the patients had at least five of the features demonstrating activity. With the exception of that case, all had two or more of the clinical features that demonstrate chronicity. At least one of the associated findings were seen in eight patients, but this incidence might have been higher if LE preps, ANA, and Australia antigen had been obtained for everyone. The most important diagnostic effort is to exclude persistent simple hepatitis and stable cirrhosis, neither of which requires anti-inflammatory drugs.

References

1. Mistilis, S.P., Blackburn, C.R.B.: Active Chronic Hepatitis. *Amer. J. Med.* 48: 484, 1970.

2. Goldins, P.L., Brown, R., Mason, A.M., et al: "Sicca Complex" in Liver Disease. *Brit. Med. J.* 4: 340-2, Nov., 1970.

3. Boyer, J.L., Klatskin, G.: Pattern of Necrosis in Acute Viral Hepatitis. Prognostic Value of Bridging (Subacute Hepatic Necrosis). *N. Eng. J. Med. 283*: 1063-71, 12 Nov., 1970.

4. Sherlock, S.: The Immunology of Liver Disease. *Amer. J. Med.* 49: 693, 1970.

SPECIAL ARTICLES

Health Insurance Blooms in the Springtime

GEORGE F. BROCKMAN, M.D.

THE constant cadence of "crisis in medical care" and "skyrocketing health care costs" have changed the debate from whether this nation should have national health insurance to when and what kind of national health insurance it will have. Thirteen major proposals have been introduced in Congress, but only three have sufficient muscle to be considered likely candidates for providing the framework for legislative enactment (as of May, 1971).

Fortunately, the legislators will have some guidance available in their further deliberations. PL-91-515, enacted in 1970, requires the Department of HEW to prepare a report for the Senate on all of the major health bills introduced in the last Congress. Most important, HEW is to provide an analysis of the cost of these proposals.

As the product of experienced experts, AMA's Medicredit Plan proposes the development of improved medical care services by insurance coverage which develops the maximum benefits from present medical practices, facilities, and capabilities. As a reasonable and rational approach, it is anathema to those who would throw out the baby with the bath water to revolutionize the medical care system of the country.

As introduced in the 92nd Congress by Senator Clifford Hansen (R.-Wyoming), Medicredit replaces Medicaid with direct federal financing of health insurance for the poor. For those slightly above the poverty line, financial participation would be graduated according to the ability to pay. For those still higher in the economic scale, health insurance premiums would be offset by income tax credits. The basic benefits would cover 60 days of inpatient care or care in an extended care facility, emergency and outpatient services, and all medical services provided by Doctors of Medicine and Osteopathy. In addition, the surprisingly popular catastrophic coverage proposed by Senator Russell Long (D.-Louisiana) last year would be included.

AMA actuaries estimate that, after adjustment by credit for federal funds transferred from the present Medicaid Program, Medicredit would cost slightly over 12 billion dollars in new money. Rather than increase federal outlays, the health insurance would be substantially financed by income tax credits which represent a nonpayment to the federal government and do not appear as a federal expenditure. Representative Wilbur Mills (D.-Arkansas), of the House Ways and Means Committee, has frequently spoken against income tax credits. A review of the record of the Committee under his leadership confirms that the Committee has approved income tax credits in at least three instances. Chairman Mill's opposition is relative, rather than absolute.

The Nixon Administration's national health insurance plan is identified as the National Health Insurance Partnership Act of 1971 (Senate 1623) and was introduced by Senator Wallace Bennett (R.-Utah) in late April, 1971. It would require that all employers provide minimum health insurance benefits for employees. These would include hospital and physician care, full maternity care, well-baby care, and laboratory expenses, in addition to the Senate Finance Committee's catastrophic coverage. This proposal avoids a drain on the federal budget by requiring that the employer directly provide this insurance on the basis of three-fourths contribution on the cost of premiums, with one-fourth contribution by the employee.

In addition to increasing the scope of medical services provided, the Administration plan introduces a new concept of medical

service—the development of Health Maintenance Organizations. Covered persons would have an option of subscribing for care by Health Maintenance Organization (HMO), rather than use the fee-for-service participation in our conventional system of care. HMO's are to be fertilized by 23 million dollars of direct seed money for these medical organizations in which physicians on capitation or salary basis would be committed, in effect, to reduce medical care costs by keeping patients out of hospitals.

While there is no concrete evidence that preventative maintenance for the human can be as productive as it is for industrial machinery, the mere hope for health cost reduction has obvious political appeal. Under Medicare, approximately 80 per cent of expenditures are for hospital services and only 20 per cent for physician services. The political leaders can be expected to grasp at anything which even hopes to reduce the major factor of expense. The sticky wicket for the Administration's plan, as of May 1, is the intolerable burden it would place on many small or marginal employers. A form of subsidy is under consideration to help these employers meet the stiff financial requirements for premiums.

The Kennedy-Griffith Health Security Program, better known as the Walter Reuther Plan or the plan of the Committee of One Hundred, would establish a wonderous bureaucracy with consumer dominance to completely overturn most aspects of the present medical care system. The massive bureaucracy would establish, on a regional basis, stiff requirements for pre-budgeting for medical service by hospitals and all other parties (including physicians) concerned in delivering medical care. Payment to physicians would be by salary, special types of stipends, or by capitation. The frank intent, in Senator Edward Kennedy's (D.-Massachusetts) words, is, "to give the private fee-for-service physician the last call on any money." The costs of this program would be financed at 50 per cent from general revenues, 36 per cent from employer payroll taxes, 12 per cent from employee contributions, and two per cent from self-employment taxes. The Committee of One Hundred estimated that the program would have cost 41 billion dollars had it been in effect in 1970. Actuaries of the Social Security Administration estimate that it would have cost 77 billion.

Completely unhampered by any reservations for fiscal or other proof, Senator Kennedy is currently holding committee hearings as a traveling circus in various locations across the country to promote the measure in a style that is hauntingly reminiscent of his elder brother's campaign for Medicare.

Although it is presently without any legislative status, peer review as a form of cost-containment for medical care is sweeping the country. Anticipating legislation somewhere in the area of Senator Bennett's Professional Service Review Organization, physician organizations are establishing peer review mechanisms, frequently by the establishment of foundations. The Kentucky Medical Association has been advised by its Committee on Medical Economics to establish such a foundation. Certainly one cannot quarrel with the concept of peer review. If physicians can develop a mechanism in which physicians of excellence could assist their weaker brethren in developing greater skill and care, *without reference to cost,* peer review could serve as a postgraduate medical institute of immeasurable potential. It could literally extend the benefits of the dedication to excellence found in our University Medical Centers to the most obscure physician, currently barely afloat in the turbulent stream of medical progress. Unfortunately, to most third-party payors and many physicians, peer review is a mechanism for cost-containment. If this view prevails, peer review will become a shabby exercise in niggardly money grabbing rather than a challenge to greater physician excellence.

Med-Ed Revisted: Part Two

THREE of the papers presented at the Third KMA Conference on Medical Education, January 23, 1971, at Park Mammoth, Kentucky, were printed in last month's *Journal.*

To conclude the two-part series, this month *The Journal* has published below four more papers presented at the conference. They represent the portions of the program entitled: "The Role of the Medical Center in Practice Models for Experimentation in the Delivery of Medical Care," "Medical School-Community Hospital Affiliations," and "Medical Legislation and the Medical Schools."

The Role of the Medical Center in Practice Models for Experimentation in the Delivery of Medical Care

CHARLES F. BLANKENSHIP, M.D., M.P.H.*

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IT would be quite wasteful of the time of this sophisticated group to attempt to report all the statements that have been made by even the most thoughtful of medical statesmen, by the most dedicated and concerned medical educators, and by the obviously politically motivated, about what is wrong with our system or systems for the delivery of medical care. Let's agree, instead, that improvements can be made in how we deliver medical care and concentrate our attention on how a university medical center can participate in effecting change, so that the new methods will be better methods.

Let's not adopt wholly the attitude of George Lichtenburg, an 18th Century German philosopher, who once said, "I don't know whether, if things change, they will get better. But what I do know is this: If things are to get better, then they must change."

Let's be sure that we agree on what the term "experimentation" means in the title of my subject: "The Role of the Medical Center in Practice Models for Experimentation in the Delivery of Medical Care." To experiment with delivery systems does not mean to tinker with them. No university medical center, nor anyone else for that matter, should be guilty of "tinkering," which is defined as "repairing or adjusting something in an unskilled manner." Some people think that was done in the enactment of legislation for Medicare and Medicaid. Many think also that suggestions are now being made, with considerable public support, for systems of medical care that are not proven, that are not known to be workable, that cannot by any stretch of the imagination be called proven or skilled. Tinkering with the medical care system seems to be quite popular.

University medical centers can contribute greatly to the process of experimentation in these matters. Few would dispute that one of the three major functions of universities is research; and that universities are uniquely qualified and prepared for research design, are experienced in the collection and analysis of data, and are careful in the interpretation of results of research efforts. If universities deserve the name they bear, if they merit the prestige they enjoy, they are characterized by doing most of the thinking about a research project or experiment before data is collected and before conclusions are reached.

The National Fund for Medical Education in a recent publication said, "In developing and testing new models of health-care delivery, the university medical centers must take the lead. It is here that the greatest capacity for research and development exist."[1] The Fund then added a sentence, "Moreover, if physicians are to practice medicine in new ways, they must be given the necessary training."[1]

It might have been well if the Fund had pointed out that great care must be exercised, in a teaching environment, to continually identify experiments as experiments. Some ideas tested in a university setting will be excellent and will contribute much to the betterment of

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medical care delivery methods. Some other experiments, some applied research in this field, will be very disappointing. It would be most unfortunate if medical students, interns, and residents, identified with trials or experiments that did not improve the system or even made it worse, thought these were presented as model systems.

In a recent discussion of this subject, Carleton B. Chapman, M.D., Dean of the Dartmouth Medical School, examined the application of complex systems theory versus the use of the intuitive process in attempting to develop solutions to the health care delivery problem. Complex systems, Doctor Chapman thinks, "give indications that suggest corrective action, which will often be ineffective or even adverse in its results." He suggests strongly that systems analysis might well produce prodigiously expensive mistakes that will take years to correct. He speaks of "humanitarian impulses coupled with short-term political pressures (that) lead to programs whose benefits, if any, evaporate quickly, leaving behind a system that is unimproved or in worse condition."[2]

Doctor Chapman prefers the construction of simulation models of medical care delivery systems "so that some ideas of its actual behavior . . . can be obtained and so that the probable effects of various changes can be studied before those changes are installed even on an experimental basis." He feels that experiments, based on the intuitive process only, and without previous simulation, "will select the wrong solution more often than not."[2]

Some, however, feel that we are ready to proceed now. Based on his forty-odd years in devising, structuring, and administering the Kaiser-Permanente system, Sidney R. Garfield, M.D., calls for bold decisive national action now. He thinks the enactment of legislation for national health insurance will make our medical care crisis worse. Nor does he endorse national pressure for group practice with prepayment schemes. He thinks group practice will add little that is good, and that a national system of universal prepayment might be catastrophic. He does advocate the immediate addition of Health Care, Health Maintenance, and Multiphasic Health Testing to our present arrangements for Sick Care.[3] I would like to see the Louisville Medical Center undertake this plan on an experimental basis.

I would not want to leave the impression that I think university medical centers, alone, can devise or work out solutions to the problems of our medical care delivery systems. They can plan applied research. They can simulate models of care. They can structure controlled experiments. They can interpret results as to statistical validity and as to proof of the stated hypothesis—but university medical centers may well be deficient in knowledge as to what our medical care delivery systems are now, as to what should be simulated, and as to what experiments should be undertaken.

In order to experiment with practice models in the delivery of medical care, the university must turn to the private practice of medicine for help in determining what the systems are now, in planning evaluation techniques, in setting up experiments on a priority basis, and in the collection, analysis, and interpretation of results.

As you may know, the University of Louisville School of Medicine is proceeding now as rapidly as possible to establish undergraduate training in family practice. An essential element of this educational tool is a model family practice unit. It will be established and evaluated as an experiment. The use of such practice models may well be the method of choice in experimentation in this field. There can be no doubt that their successful use will have to be planned and conducted jointly by universities and those engaged on a day-to-day basis in the practice of medicine. Such cooperative effort can, and undoubtedly will, be a significant educational success for all persons concerned with it and will, I am certain, help point the way to improved medical care delivery systems.

References

1. Success Story #3, *Stimulating Innovation in the Delivery of Health Care*, National Fund for Medical Education, 2 West 46th Street, New York 10036.

2. Chapman, Carleton B., M.D., M.P.H.: The Changing Scene, The Academic Health Center and Health Care Delivery. *Journal of Medical Education*, Vol. 45, No. 12, December, 1970.

3. Garfield, Sidney R., M.D.: Prevention of Dissipation of Health Services Resources. Presented at the American Public Health Association meeting, Houston, Texas, October 23, 1970.

The Role of the Medical Center in Practice Models for Experimentation in the Delivery of Medical Care

Richard A. Carter, M.D., M.P.H.*

Lexington, Kentucky

THIS morning I would like to comment upon three aspects of the role of the medical center in developing experimental practice models in health care delivery. First, let us account for the major groups which must be included in a practice model; second, let us discuss the reasons behind the topic; and, third, let us discuss the spirit of experimentation.

Three basic interest groups will determine the kind of health care delivery systems of the future—consumers, educators, and practitioners. This morning only two of those groups are represented, the practitioners and educators, *not* the consumers. While we here may be able to come to some agreement on the proper delivery system, consumers will still have to accept the product of our thoughts and actions.

It is evident that these three interest groups are thoroughly interlinked. For example, even the relationship between educator produced models and practitioner models is one of the chicken and the egg. Educators can hardly set up models and begin producing new manpower if that manpower cannot find employment in practitioner systems.

Conversely, new, or old, practitioner models can hardly expect to exist if the manpower produced by educators does not fit the systems. As an example of the latter condition, consider the demise of the general practice model. The practice model is and was accepted, yet the educational process did not and does not produce manpower to staff the model.

As an example of the former condition, consider the difficulty in making neighborhood health centers work. The manpower entering such experimental models must be retrained to work together as a functioning unit and provide leadership, supervision, and training for non-physician personnel. When pediatricians and internists, and perhaps obstetricians and surgeons, are expected to provide family centered curative and preventive care, as a team, they are most often completely lost. By way of education or practice model, they seldom talk to one another, let alone function as a unit. They at first observe only the problems they have been expected to observe in their training, and in their training they are completely isolated from one another.

While medical center departments are perfectly designed to divide all health problems into categories often necessary and sufficient for research and education, they are not designed to deliver service. Consequently, the manpower produced is more often ready for research and teaching activity than service activity. If such manpower elects to enter a practice model, retraining becomes necessary. They must learn to communicate with different disciplines, medical and non-medical, from which they have been isolated. They must learn to divide labor equitably. They must learn to give and take constructive criticism. This kind of learning is painful, and a frequent way to avoid it is to dig further into super-special activities.

This is where the consumer comes in, either organized in blocks or as an individual. He wants practitioners who can communicate with him about the problem he has—at a bargain price. He usually does not need open heart surgery, renal dialysis, cobalt irradiation, coronary care, or 80 per cent of the technical advances of the last few years. In fact, as an organized consumer, he realizes that the more highly trained manpower and money which goes to maintain these advances, the less highly trained manpower and money there is avaliable to take care of *his* usual and customary problems.

One might speculate on the number of persons who go without primary care for every coronary care unit, etc. maintained. Yet, the model which we, the medical practitioners and educators, have come up with is completely overbalanced to secondary crisis care and high prices. This model is no longer selling very well. Alas, the consumer is part of the system and *he*, not the educator or practitioner, demands new models of health care delivery.

*Assistant Professor of Community Medicine, University of Kentucky

This brings me to the second consideration. Why are we even talking here today adout developing model health care delivery practices? The answer is simple. Not only the consumer, but also the educator and practitioner, are beginning to recognize that the present models do not work. It must be faced. The present models are not as efficient, effective, or safe as they should be, given what they cost the consumer. Examples of inefficiency abound. A review of hospital, institutional, and ambulatory utilization is proposed by the practitioners themselves as an answer to over-utilization. Hospitalization costs are off the graph. If savings could be made, then the same resources in manpower could be expended on primary curative and preventive care which, in turn, might further reduce the need for hospitalization and institutional care.

Yet, inefficiency is only one part of the problem. Practice models are ineffective and unsafe. The United States spends nearly the greatest percentage of its gross national product on health care, yet it ranks behind most other developing countries in infant mortality and life expectancy statistics. Furthermore, there are grave questions as to whether the medical care system really has anything to do with infant mortality or life expectancy.

For example, while the infant and general mortality rates for nonwhites are higher than that for whites, these mortality rates have fallen at the same rate as the white races from 1900 to the present time.[1] If it is assumed that the nonwhites have not enjoyed any better medical or public health care during that period than they do today, then one must ask the question, "How effective is the health care system if those who have received less health care have experienced the same rate of decrease in mortality rates as those, the whites, who received the bulk of the care in the last 70 years?"

Furthermore, the fact that the nonwhite female life expectancy now equals the white male life expectancy does not argue well for the effectiveness of the nonconsumer health care system components, either practitioners or educators. Finally, to deny that mortality rates are valid indices of health care effectiveness is to deny 70 years of public relations work. What is more, it is sour grapes!

The present models are also of questionable safety. The Food and Drug Administration recently announced that five per cent of hospitalizations are due to prescribed drug reactions. While this rate is unbelievably high, it does not include non-hospital morbidity, nor surgical morbidity, nor the morbidity causes to those consumers unable to afford entry into the current delivery system. Thus, there are ample reasons for the educators and practitioners to demand new models, more efficient, effective, and safe.

Certainly, some changes can be made; and experimental practice models can be designed to solve as best we can the problems of the consumers, practitioners, and educators, but it will take from all parties the spirit of experimentation. The spirit of experimentation includes the willingness to try, the ability to evaluate, and money.

Experimental practice models are expensive, and thus educators are faced with finding the money to finance such models. Money has strings attached by the grantor. For example, to get federal money now, one must include prepayment financing, allied health manpower, and efficiency and effectiveness incentives. Will practitioners be willing to let the educators accept such funds in order to experiment with such models? Will the consumer be willing to let the educators educate manpower in these models? Will both the consumer and practitioner groups be willing to let the educator evaluate the effectiveness and efficiency and safety of comparative practice models? These are open questions that must be answered in the affirmative if experiments in health care delivery are to become possible.

Even if experimental models become possible, can such models be evaluated? Because practice models are expensive, the number of

experimental trials is limited, even on a national basis, let alone a state or single medical center basis. With a limited number of trials, or a single trial, the methods of evaluation are extremely limited. One cannot compare a set of models that do nothing, versus a set of models that do something specific, in order to measure the effectiveness of the latter. One is stuck with a single case history study or a few case histories.

For example, the OEO's neighborhood health centers are expensive, yet nationally there are nearly enough of them to make a comparative evaluation, but design features and circumstances vary from center to center to such an extent that valid comparisons are extremely difficult to make. Yet, some are obviously very good, while some are horrible. Thus, limited as we are in our ability to evaluate, and perhaps our willingness to try, but pressed as we are to experiment, we are bound to have large failures in pursuit of modest successes. We must do our best to find the good, discard the bad, and try again.

Bibliography

1. Table No. 67, Selected Life Table Values 1900-1967, U.S. Bureau of the Census Statistical Abstract of the United States 1969, 90th ed., Washington, D. C., 1969.

Medical School—Community Hospital Affiliations

Robert C. Long, M.D.*

Louisville, Kentucky

THIS presentation advocates medical school-community hospital affiliations and will attempt to further develop the concept that such affiliations are not only desirable, but also essential for improved undergraduate, graduate, and continuing medical education. If this concept is valid, then it follows that the health of a community in which these affiliations exist will benefit immeasurably.

Several factors contribute to an increasing need for effective relationships between community hospitals and medical schools:

1. Many medical schools are undergoing change in relation to the communities and areas which they serve. Much of this change is a result of recent federal programs—Medicare, Comprehensive Health Planning, and Regional Medical Programs, for example.

2. Many community hospitals are changing emphasis and broadening their scope. A transition from the concept of a hospital solely for the care of the sick, to that of a community health center concerned with prevention and detection of disease, as well as diagnosis and treatment, is occuring throughout the country.

3. Graduate medical education is increasingly being recognized as a proper responsibility of medical schools. Community hospitals with physicians involved in clinical teaching are essential to the effectiveness of medical schools in this phase of medical education.

4. The concept that health is a community affair, coupled with methods of reimbursement under Titles XVIII and XIV, is leading to a greater interdependence between medical schools and community hospitals.

5. It would appear that combining the differences of undergraduate, graduate, and continuing medical education in a community hospital with those in a university hospital enhances the quality of education and medical care. Important and legitimate differences do exist and should be capitalized on. For example, community hospital training offers certain advantages in terms of: 1) patient population, 2) patient responsibility, 3) relationships with attending staff men, and 4) a trial period to evaluate a community for future practice.

The university hospital, on the other hand, offers advantages in terms of: 1) intellectual

Practicing physician; Chairman, KMA Committee on Public Relations

environment, 2) research and teaching, and 3) exposure to more exotic and complex disease processes such as organ transplantation and the like.

With regard to continuing medical education, its success or failure is reflected in medical care. Therefore, lifelong continuing education of the physician to maintain and increase his quality, efficiency, and productivity is the responsibility of the entire medical profession.

The university hospital, the medical school, and the community hospital are all necessary for continuing education. They have a symbiotic relationship. They are dependent on one another for the maintenance of both the educational and service aspects of our health care system. It is time to abolish academic condensation toward the community hospital and defensiveness by the community hospital.

It is time for mutual respect, for all have enormous responsibilities.

Medical Legislation and the Medical Schools

Myron G. Sandifer, Jr., M.D.*

Lexington, Kentucky

THE primary objective of the opening comments is to provide a point of view from which the discussion groups might proceed. For this reason, a position of advocacy is taken on three points.

1. The length of the medical education. This issue refers specifically to the number of years spent in medical school though, in fact, the term properly includes premedical and postgraduate education as well. The Kentucky statutes are like those of 27 other states which specify a length of medical curriculum. In Kentucky, the key phrase is "a four year course." Reference is made to national trends, as expressed in the Carnegie Report and by the President of the AMA, favoring a three year medical curriculum. It is recommended that the phrase, "a four year course," be deleted from the statutes to provide greater flexibility in planning medical curricula.

2. The internship. Like 30 other states, Kentucky requires an internship for licensure. Seven specialty boards now no longer require an internship specifically. Viewed in this context, the first year in pediatrics is called an internship, but it also could be called a first year of pediatric residency. In order to give a broader definition of the term, internship, the speaker recommends that the phrase "clinical postdoctoral year" be substituted in the statutes for the word "internship." Elimination of a postdoctural year is not advocated. The requirement would stay the same; the name would be changed.

3. Licensing of health professionals. The emergence of new types of health professionals, and specifically the physician's assistant, requires reexamination of laws for certification and licensure. However, the complexities are such that at a national level, a moratorium on additional licensing laws has been recommended. The speaker accepts this position and recommends that there be a moratorium for a period of two years on additional licensing laws for the health professions.

*Associate Dean for Academic Affairs, University of Kentucky Medical Center



EDITORIALS



A Point at Issue

IN MANY vigorous and stimulating ways, the development of the Ohio Valley Regional Medical Program, over its short life span of five years, has served as an exemplary model for its genre. Blessed with intelligent administrative leadership from the start, it has coddled and educated its Advisory Council to its duties and has received in return the devoted attention and time-consuming concern of the Council's members, through 15 day-long meetings. Many, many more meetings of various advisory and planning sub-committees have been held, and inter-communications within the group—utilizing WATS lines and more pounds of paperwork than I dare contemplate—have been frequent and intense. What has been accomplished?

First, OVRMP exists. To survive is in itself an accomplishment, in the midst of the constantly shifting sands of Federal guidelines for finances.

Second, OVRMP has brought together, in productive discussions about health care, a genuinely exciting mix of "Producers" and "Consumers"—this may well be its most important ultimate accomplishment. Given now a yearly Federal ante of some one million dollars to distribute, the Council's 36 businessmen, deans, hospital administrators, pharmacists, nurses, dentists, and, yes, even practicing doctors—all have learned a lot, in such a decision-making process, about the strengths and problems, hopes, and fears of the others. We have all learned especially that health care is a complex matter, not easily given to simple measures of improvement.

Third, to progress to more detail, OVRMP has established throughout its working area—the eastern two-thirds of Kentucky and southern Ohio—a group of a dozen community hospitals in which it has supported full-time Directors of Medical Education. It has supported markedly improved Postgraduate Medical Education activities at Cincinnati and Lexington (and, to a lesser extent, Louisville) medical schools. It has helped start a Library Extension project, to make library data more readily available to any physician in the region. It has funded drug information, multi-phasic screening, home care, and various physician's assistants projects, to name a few more. In short, for a fledgling program, with the inherent possibilities of delay and Federal inefficiency contained therein, OVRMP has progressed at a reasonable rate and has some solid achievements to its credit.

About a year and a half ago it was felt that for OVRMP, even at a million dollars a year, to have a significant impact on such a broad region, a focus for its activities was necessary. The Council, therefore, agreed to limit future project support to those involving "the development and more effective utilization of *health manpower*, for the delivery of improved ambulatory care." This has been further refined by staff to include projects in areas of: 1) organized ambulatory care (i.e., Health Maintenance Organizations), 2) physician assistants, 3) prevention and follow-up (multiphasic screening, home care programs), 4) patient medical records (problem-oriented medical records), 5) emergency services, and 6) coordination of regional resources (i.e., chronic renal disease, stroke rehabilitation, etc.).

An impressive and praiseworthy list of possibilities that is indeed—most bearing much

potential benefit for our patients and for us. To develop pilot projects in any of those fields will probably be helpful and informative, and yet one cannot scan the list without wondering about one item in particular—the extent of support for, and the definition of, Health Maintenance Organizations (HMO). Since the proposed budget devotes almost one-third of the total funds to this one item, and since most Federal agencies define HMO only in terms of "pre-paid group practice on a capitation basis"—i.e., exclusive of fee-for-service —this writer believes this activity, while most appropriate on a pilot or study basis, should be watched carefully by practicing physicians in Kentucky.

OVRMP has itself already made a separate application to HEW for funds to set up an HMO, acting for the AFL-CIO and other groups, in Louisville. Now HMO's may well turn out to be a valuable part of the American medical scene, and AFL-CIO has every right to set up such a program, in Louisville or anywhere else; but I question the wisdom of having the developmental grant in OVRMP's name. If such a course is widely pursued, I believe this fine program, and medicine in this Region, may suffer.

HMO's? Sure, try 'em on a pilot basis. OVRMP? Let's keep it independent, to stimulate, advise, and evaluate *all* types of health care.

WALTER I. HUME, JR., M.D.

Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Dear Editor:

Apart from the fact that I do not agree with my president, Doctor Quertermous, that practice in Harlan County is not rural practice, I am moved to take issue with other statements in his recent Letter to the Editor, a reply to Doctor Leveridge.

As a Johnny-come-lately to the Kentucky scene, I am often amazed by some of the academic accomplishments in this state which are often unknown to Kentucky physicians or too frequently unappreciated.

The University of Kentucky was the first modern medical college in the nation to formally extend its interest and activities outside the walls of its institution, in fact outside its community. It did this by establishing full-time field professors in such communities as Madisonville, Morehead, Harlan, Hazard, and Somerset.

If readers are amazed at how small this effort is, I am amazed at how large it is. There are obvious financial and personnel limitations which would make it impossible to work in every region or community of the state—yet with this small nucleus, we have come close to doing even that. The field professors have involved themselves in the health problems of those communities and regions and in problem-solving solutions, including the critical one of manpower shortages. In ten years they have brought 466 students into communities in every region of Kentucky to study at first hand the health problems of concern, under the contributing tutelage of *practicing physicians*. Is that good—or bad? That pioneering program, under the leadership of Kurt Deuschel, M.D., and his Dean, William Willard, M.D.; and now Abram Benenson, M.D., and Dean William Jordan, M.D., was exciting enough that it figured prominently in bringing me to Kentucky and to this University. The program offers doctors a great chance to recruit.

The University of Kentucky has been lambasted both publicly and privately by one of its students, Grady Stumbo, for "not doing enough to orient young graduates toward these (poverty) areas." We are involved in the leadership which has contributed to the development of the Clover Fork and KT Valley rural health centers in southeastern Kentucky, to the development of Family Practice training programs at Harlan and Madisonville; and it is my expectation that the now established Department of Family Medicine at our University of Kentucky Medical Center will be activated with the arrival of a department chairman by this fall.

In addition to the considerable, in fact I would say unprecedented, exposure of medical students to the practice of medicine throughout Kentucky, including both rural and urban poverty areas, we have expressed in action a supportive interest in both young and old doctors by way of our program in continuing education. This university made a significant financial and personnel commitment to that enterprise, and is continuing to do so, above and beyond the support that it receives from all sources, including that of physicians and government agencies. It is continuing to do so because it believes it should. I say that freely because that commitment was here long before I came to Kentucky.

There have been 399 graduates of this medical school through 1970, of whom 37 are in private practice in Kentucky, 11 (30 per cent) in rural southeastern Kentucky. The bulk of the graduates (315) of this young school are either still in military service or graduate training. An additional 71 of our past resident staff from other states and schools have entered private practice in Kentucky. The record to date is commendable. If the trend continues, I suggest that the efforts of our medical school teachers have been unusually successful.

If Grady Stumbo said and "hit the nail on the head when he said, in effect, that the medical school teachers are not doing enough to orient young graduates toward these (poverty) areas," I would like to ask, how about hitting another nail on the head? Could we have some *constructive* suggestions from anyone concerned as to just how we could make better use of the resources that have been placed at our disposal? They are not limitless. Orienting "graduates toward these (poverty) areas" is not our only responsibility.

I find the free-wheeling advice that the faculty at UK should provide "more lessons in humility and courage" offensive and uncalled for. As I have come to know this faculty, it is not lacking in these qualities and compares in the demonstration thereof very favorably with physicians in other walks of life.

I would like to make one final point. If students

are attracted to commit their lives to medicine, where it is needed, in rural and other areas, it will not be solely because medical school faculties have encouraged and cajoled them into that career. In fact, of all influences, that may well be among the least. That commitment will, among other things, be largely dependent on the fact that such a career has been made important and attractive, and also possible, for young doctors *by the physicians already in practice in such areas,* and by the supportive action of many societal agents, including organized medicine.

Frank R. Lemon, M.D.
Associate Dean
Continuing Education

EDITOR'S NOTE: The Editorial Board of The Journal forwarded Doctor Lemon's letter to John C. Quertermous, M.D., President of KMA. The following is his reply.

Dear Editor:

Because of the many ideas propounded by Doctor Lemon in the above letter, I will take the liberty of commenting on his letter paragraph by paragraph.

Initially: I am still hard to convince that a county having about 50 physicians, two-thirds of them highly specialized, with a physician population ratio of 1:700, will qualify as a medical "rural poverty area" in Kentucky.

The information contained in paragraphs two to seven is timely and welcome. I wish all our members could, or would, read this graphic description of the efforts being made to resolve some of our problems. Doctor Lemon mentioned Doctors Willard, Deuschel, Jordan, and Benenson as pioneers in trying to provide doctors to needy areas. I have known Doctor Jordan and Doctor Willard personally for a number of years and know them to be extremely capable and dedicated men. For well over ten years, I have watched Bill Willard perform brilliantly and imaginatively, on a local and national level, as one of the great leaders in medical education. I have learned much from him, and found our small differences have become increasingly less. (Our differences arose over the role HEW and/or federal money should pay in alleviating Kentucky's medical circumstances — didn't they, Bill?)

I don't know Doctor Benenson or Doctor Deuschel, but I certainly haven't meant to detract from their efforts.

Penultimately: I can only say, " 'Touche,' Dr. Lemon." I plead guilty to being somewhat glib concerning a point I wanted to make (i.e. "A teacher should provide more lessons in courage and humility.") Now it wasn't all that bad, was it?

Finally: Doctor Lemon's last paragraph makes the same point I have already made in talks and writing, except for the fact that I firmly believe a student is oriented, many times, by his teachers' philosophies, toward certain types of practice and the geographic areas where he may practice. The fact that a medical student's instructor is nearly always a specialist has much to do with the students aspiring to attain this same level in medical education. This orientation, in turn, may have caused and may continue to cause the production of too few family practitioners and too many specialists for the current needs in Kentucky.

John C. Quertermous, M.D., President
Kentucky Medical Association

ORGANIZATION SECTION

General Sessions To Deal With Timely Topics At KMA Annual Meeting, September 21-23

The four general sessions of the 1971 KMA Annual Meeting will feature scientific presentations that are both timely and informative for today's physician. Guest speakers from across the country will address physicians on such subjects as Immunology, Infectious Disease, Cancer, Hypertension, and Drug Abuse.

The three-day session, which will be held September 21-23 at the Convention Center and Seelbach Hotel, will also feature an Ask the Expert session on the afternoon of September 22, meetings of 16 specialty groups, meetings of House of Delegates of KMA, the President's Luncheon, technical and scientific exhibits, an Orientation Program for new members, and meetings of the Woman's Auxiliary to KMA.



Doctor Gold



Doctor Klatte

Participating in the opening session on September 21 will be Martin I. Gold, M.D., Baltimore. Doctor Gold, a guest of the Kentucky Society of Anesthesiologists, will speak on "Status Asthmaticus." He is a Professor of Anesthesiology at the University of Maryland School of Medicine, and is Medical Director, Inhalation Therapy and Division of Acute Respiratory Care, and Chairman, Committee on Hospital Respiratory Care, of the University of Maryland Hospital.

Speaking Tuesday afternoon on the general topic of "Cancer Symposium—Aids to Diagnosis" will be Eugene C. Klatte, M.D., Nashville. Doctor Klatte will address the session on "New Aids in the Diagnosis of Lung Cancer." A guest of the Kentucky Chapter, American College of Radiology, he is Chairman of the Department of Radiology, Vanderbilt University School of Medicine, a renowned author, and a member of the Board of Chancellors, American College of Radiology.

Information regarding other speakers will be carried in future issues of *The Journal.*

Tax Exempt Status Is Clarified On McDowell Memorial Fund

A ruling on the tax exempt status of the McDowell Memorial Fund has recently been clarified, according to Laman A. Gray, M.D., Louisville, Chairman of the Board of Managers, McDowell Memorial Fund.

Charles F. Wood, Attorney for the Brown Foundation and a consultant for the McDowell Memorial Fund, said in a letter to Doctor Gray:

"The McDowell Memorial Fund is an active, operating exempt institution under Section 501(c)(3) of the Internal Revenue Code. The McDowell Memorial Fund, as of November 9, 1970, has been classified as an organization that is not a private foundation as defined in Section 509(a) of the Internal Revenue Code.

"It is readily apparent that the McDowell Memorial Fund is operating in good standing with the Treasury Department, has completed the most recent forms required of exempt organizations, and can, under the law, be a proper recipient of a grant or gift from any donor who is interested in preserving this bit of historic heritage."

"If sufficient funds could be obtained in the McDowell Memorial Fund, the interest on such a fund could assure the perpetuity of the House," said Doctor Gray. "Your Committee wishes to suggest to physicians in the Kentucky Medical Association that they consider a bequest in their wills to the McDowell Memorial Fund."

Dr. Smith Elected At KAGP Mtg., Dr. Cooper Is Honored

The Kentucky Academy of General Practice named Paul R. Smith, M. D., London, President-Elect at its 20th Annual Scientific Assembly, May 4-6 in Louisville. Kenneth M. Elben, M. D., Henderson, was installed as President, succeeding Benjamin F. Roach, M. D., Midway.



Doctor Smith

The three-day assembly featured world renowned speakers, a Crackerbarrel Session, and a meeting of the Congress of Delegates. A highlight was the presentation of the Citizen Doctor of the Year Award to Carl Cooper, Jr., M. D., Bedford. Doctor Cooper is the Vice-Speaker of the House of Delegates of KMA.

Other officers elected at the meeting are: John W. Ambach, M. D., Louisville, Vice-President; Harold D. Haller, M. D., Louisville, Treasurer; and Michael L. Peveler, M. D., Louisville, Secretary.

Reelected to serve as Delegate and Alternate Delegate to AAGP were Edgar B. Morgan, M. D., Louisville, and Thornton E. Bryan, Jr., M. D., Cadiz. Walter H. Zukof, M. D., Louisville, was appointed Editor of *The KAGP Journal.*

Next year's Annual Assembly has been scheduled for May, at the Lake Barkley Lodge.



John C. Quertermous, M.D., (right) President of KMA, is shown presenting AMA-ERF checks to Douglas M. Haynes, M.D., (left) Dean of the University of Louisville School of Medicine, and William S. Jordan, M.D., (center) Dean of the University of Kentucky College of Medicine.



Tim Lee Carter, M.D., a Member of Congress from the Fifth Congressional District of Kentucky, is shown speaking at the dinner meeting of the 1971 Interim Meeting, held April 15-16 at Cave City. His topic was "Congress and Health Care."

Seelbach Hotel Is Named A. M. Headquarters

The Executive Committee of KMA has named the Seelbach Hotel as the Headquarters Hotel for the 1971 KMA Annual Meeting.

The Committee was influenced in its decision by the possibility that the Kentucky Hotel, formerly the Annual Meeting Headquarters, might be sold and converted for other use.

The Louisville Convention Housing Bureau will again be available for use by all those planning to attend the Meeting. Forms for securing lodging reservations and for pre-registering at the Annual Session are included in this issue of *The Journal* on page 459.

Lee C. Hess, M. D., Chairman of the Executive Committee, urges all members to make reservations early while good rooms are still available. Doctor Hess points out that members can cancel their reservations if they find they will be unable to attend the meeting, but those waiting until the last minute might have difficulty in obtaining a room.

August 19 Is The Deadline For Awards Nominations

The KMA Awards Committee has set August 19 as the deadline for receiving nominations for KMA's three top awards, according to Committee Chairman, Douglas E. Scott, M.D., Lexington.

Nominations for the Kentucky Medical Association Award, the Distinguished Service Award and the Outstanding General Practitioner Award should be sent to the Headquarters Office and marked "Attention: Awards Committee." Those received after the August 19 date will not be eligible for consideration in 1971.

Presentation of the awards will take place during the President's Luncheon at 11:50 a.m., Wednesday, September 22.

Trustee Districts Have Held Annual Meetings

The Fourth, Twelfth, and Thirteenth Trustee Districts held annual meetings during April and May.

Comprehensive health planning, legislative activities, and peer review were among the subjects discussed at the annual meeting of the Fourth District, held April 22 in Elizabethtown. Guest speakers were Mr. Strawn Taylor, Executive Director of the State Comprehensive Health Planning Council; Fred C. Rainey, M. D., Elizabethtown, Chairman for State Affairs of KMA's Committee on Legislative Activities; and Marvin A. Bowers, Jr., M. D., Louisville, Chairman of KMA's Claims and Utilization Review Committee.

The Twelfth District held its annual meeting on April 28 at the Danville Country Club. John C. Quertermous, M. D., Murray, President of KMA, addressed the group on the activities of the State Medical Association; and Doctor Bowers spoke on state and national activities in the field of peer review.

The Thirteenth District members met on May 4 in South Point, Ohio. William P. McElwain, M. D., Kentucky's Commissioner of Health, addressed the group on the present and future role of Medicaid in Kentucky.

Camp For Diabetic Children

Camp Hendon will be held this year August 8-21. This sixth annual camp for diabetic children, ages eight through 15, is sponsored by the Kentucky Diabetes Association; it will be at Camp Kysoc, two miles east of Carrollton.

There will be a complete summer camp program, plus the full-time medical, nursing, and dietary supervision needed by diabetic children. As before, the camper's fee is $110; but some "camperships" are available. Further information and camper applications can be obtained from Camp Hendon, 624 Fincastle Building, Louisville, Kentucky 40202. Phone (502) 585-4825.



Shown above just before the dinner session of the 1971 Interim Meeting are: (left to right) Tim Lee Carter, M.D., Member of Congress and the main speaker for the evening session; Carl Anderson, M.D., Santa Rosa, Calif., Chairman of the California Blue Shield Board and participant in the Interim Meeting program; and John C. Quertermous, M.D., Murray, President of KMA.

Kentucky OB/GYN Society Elects Dr. McGruder President

C. J. McGruder, Jr., M. D., Henderson, was elected President of the Kentucky Obstetrical/Gynecological Society, at the April 9 meeting of the group. According to John W. Greene, Jr., M.D., Lexington, outgoing President, Glenn W. Bryant, M.D., Louisville, was elected Vice-President; while Clinton R. Potts, M.D., Louisville, was chosen Secretary-Treasurer.

Elected to the Executive Committee were John L. Duhring, M. D., Lexington, and Edward W. Connelly, M. D., Ashland.

The new officers will take office in September at the fall meeting of the group.



John C. Quertermous, M.D., President of KMA, is shown at the podium immediately following the presentation of a plaque honoring C. C. Howard, M.D., Glasgow, for 25 years of service as Chairman of the Rural Kentucky Medical Scholarship Fund. The plaque was accepted by Carolyn S. McKinley, M.D., Glasgow, Doctor Howard's daughter. Also shown are President-Elect John S. Harter, M.D., Louisville, and KMA Secretary, S. Randolph Scheen, M.D., Louisville.

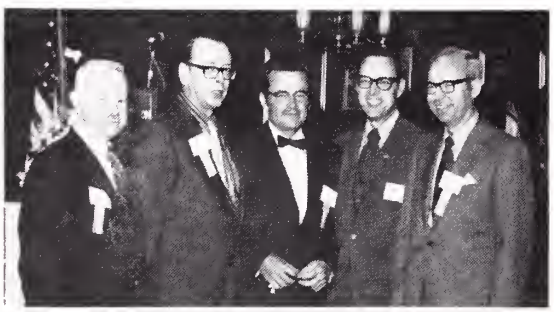


Part of the large crowd that attended the 1971 Interim Meeting.

KSIM Elects Officers

The Kentucky Society of Internal Medicine elected Wilfrid Gettelfinger, M.D., Louisville, President-Elect and A. Evan Overstreet, M.D., Louisville, Secretary-Treasurer at the May 8 meeting of the group. John E. Myers, Jr., M.D., Lexington, was installed as President, succeeding C. Nicholas Kavanaugh, M.D., Lexington.

The KSIM held its annual meeting this year at the Kentucky Dam Village. During the meeting, a resolution was passed to support, in principal, the efforts of KMA to establish a foundation to insure more comprehensive and economical medical care throughout the state.



Pictured above at KMA's 1971 Interim Meeting are: (left to right) H. Burl Mack, M.D., Peewee Valley, and Marvin A. Bowers, Jr., M.D., Louisville, who participated in the panel discussion on peer review; John C. Quertermous, M.D., Murray, KMA President; Mr. Dave Powers, AMA Staff, Chicago, who spoke during the panel discussion on liability insurance; and Hoyt D. Gardner, M.D., Louisville.

Patrick J. Jasper, M.D., has joined Robert N. McLeod, Jr., M.D., Thomas M. Wilson, M. D., and William T. Watkins, M. D., in practice in Somerset. A specialist in pediatrics, Doctor Jasper graduated from the Vanderbilt University School of Medicine, interned at Vanderbilt Hospital, and served his residency at North Carolina Memorial Hospital.

In Memoriam

CLARENCE D. HAWKINS, M.D.
Louisville
1891-1971

Clarence D. Hawkins, M.D., 80, a Louisville family practitioner, died April 10. A 1914 graduate of the University of Louisville, Doctor Hawkins was a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

CHARLES G. MCLEAN, M.D.
Lexington
1904-1971

Charles G. McLean, M.D., 67, a Lexington surgeon, died March 26. A 1929 graduate of the Vanderbilt University School of Medicine, Doctor McLean was a member of the Fayette County Medical Society and the Kentucky and American Medical Associations.

HUBERT V. NOLAND, M.D.
Louisville
1895-1971

Hulbert V. Noland, M.D., 75, a practicing internist and clinical professor of medicine at the University of Louisville School of Medicine since 1926, died April 22 in Louisville. A native of Whitesboro, Texas, he was a 1921 graduate of the University of Louisville School of Medicine. He served his residency in medicine and pathology at General Hospital in Louisville. Doctor Noland was a Fellow of the American College of Physicians, a member of the Jefferson County Medical Society, and the Kentucky and American Medical Associations.

ERNEST C. STRODE, M.D.
Lexington
1911-1971

Ernest C. Strode, M.D., 59, a Lexington surgeon, died March 29. A native of Winchester, Doctor Strode began his practice of surgery in Lexington in 1946. A graduate of the University of Louisville School of Medicine in 1936, Doctor Strode interned at the Good Samaritan Hospital and served his residency at General Hospital in Louisville. He was a member of the Fayette County Medical Society, Kentucky and American Medical Associations, Southern Surgical Association, Kentucky Surgical Society, and Kentucky Chapter of the American College of Surgeons.

HYLAN H. WOODSON, M.D.
Eddyville
1889-1971

Hylan H. Woodson, M.D., 82, a family practitioner in Eddyville, died February 5. A graduate of the University of Louisville Medical School, Doctor Woodson was a member of the Lyon County Medical Society and the Kentucky and American Medical Associations.

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HEADQUARTER

Digest of Proceedings, Board of Trustees Meeting

April 14, 1971

The third meeting of the Board of Trustees was held April 14, 1971, in conjunction with the KMA Interim Meeting in Cave City. The meeting began with the President's Report given by John C. Quertermous, M.D., followed by the Headquarters Office Report.

Ballard W. Cassady, M.D., Chairman of the KMA Budget Committee, presented the proposed budget for the 1971-72 Associational Year. After study and discussion, the budget was approved by the Board.

A report on the Medical Economics Committee was given by its Chairman, Henry B. Asman, M.D. The committee recommended that KMA form a Medical Foundation, primarily concerned at first in the field of peer review, but with a broad scope to assure KMA's leadership in health matters. The non-profit tax-exempt corporation could accept outside funds to accomplish its goals. After considerable discussion, the Board approved the report and instructed Doctor Asman's committee to continue its study and provide the membership with the reasoning for a KMA Foundation, prior to the Board submitting its final recommendation to the House of Delegates.

Thomas L. Heavern, Jr., M.D., Chairman of the Ad Hoc Committee to Study Peer Review Activities, presented a one-month survey made by his committee showing the amount of physician time spent in hospital and extended care facilities conducting peer review. He stated that the survey would continue for three more months and received permission to inquire of similar surveys in the other 49 states.

The Chairman of the Board, Lee C. Hess, M.D., announced that membership for peer review committees have been nominated for most districts. Each District Trustee was then asked to report on the status and the members who had been recommended in his district. The Board appointed Regional Peer Review Committees in the 1st, 2nd, 6th, 7th, 9th, 11th, and 13th KMA Trustee Districts.

Donald Patterson, M.D., representing the Department of HEW, was recognized by the Chairman to present some comments on health maintenance organizations. A question and answer session followed Doctor Patterson's presentation.

George F. Brockman, M.D., Chairman of the KMA Building Committee, informed the Board that Design Environment Group Architects had been selected by the Executive Committee to construct the new proposed addition to the Headquarters Building. Doctor Brockman presented the preliminary plans along with a slide presentation of the proposed additions. Mr. James Gibson, a representative of the architectural firm, was introduced. After considerable discussion, it was the opinion of the Board members that the Board was too large a body to discuss the building proposals; therefore, it was moved and seconded that the entire matter of the building addition be referred back to the Executive Committee with the assistance of the Building Committee to further study the matter and make recommendations to the Board.

The Medical Education Committee recommended to delete the four-year requirement for a M.D. degree to a three-year program which was referred to the Legislative Committee for study. A request for committee members to serve three-year terms was also received favorably.

The Board appointed a committee to study ways of interesting students in the medical profession in Kentucky and of encouraging physicians in other states to practice in Kentucky. The committee is to recommend to the Manpower Task Force of the Comprehensive Health Planning Council. Executive Committee recommendations acted upon favorably were: to continue the Orientation Program during the Annual Meeting and to refer to the Constitution and Bylaws Committee the Board request that Alternate Trustees be made members of KMA's House of Delegates.

The Chairman called on KMA's Legal Counsel to report on the lawsuit involving Bonco Labs, Inc. Following a full discussion, the report was accepted for information.

Chairman Hess informed the Board members that since the Kentucky Hotel may be sold in the near future, tentative study is now being made on the possibility of moving this year's Annual Meeting to the Seelbach Hotel. Following a brief discussion, the Board approved that the matter be referred to the KMA's Executive Committee, with a desire expressed that the Headquarters Hotel be changed.

David A. Hull, M.D., a Trustee and member of the Legislative Committee, reported on the 1971 Washington Dinner. He informed the members that the function was well attended and very productive.

The Chairman reported that recently considerable discussion has arisen concerning the duties and composition of the State Board of Health and the separation of medical licensure from the Board. After a brief discussion, the Board agreed that representatives of the Board of Health and KMA should meet in the near future.

The Board was informed that the Department of

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Health, Education and Welfare has scheduled two meetings in April, and that it has asked that a KMA staff member and a physician attend these meetings. The Board was also informed that a request has been made by the Merrell Company that KMA take a position against the action of the Food and Drug Administration to remove combination drugs from the market. The Board instructed the KMA Legal Counsel to compose and send the aforementioned letter and approved representation at the HEW meetings.

The meeting closed with the Board of Trustees nominating Robert N. McLeod, M.D., for appointment to the AMA Committee on Medical Aspects of Sports and with the announcement that President Quertermous would be attending the Annual Meeting of the Comprehensive Health Planning Conference and a statewide session on health care costs sponsored by the Kentucky Chamber of Commerce during the first week of May.

April 16, 1971

The Board of Trustees held their fourth meeting of the Associational Year, April 16, 1971, during the Interim Meeting in Cave City.

The Chairman, Lee C. Hess, M.D., reported that the Executive Committee had made further study of the proposed addition to KMA's Headquarters Office and had recommended that the architect draw up plans for the new addition in three stages. The basic plan which would include the excavation area and the office space being proposed; the second stage would be made up of the conference area proposed; and the final stage would consist of the shell portion of the second floor of the office section.

The Board agreed that no further action would be taken on the proposed addition until after a trip by the Building Committee, staff, and architect to Mississippi to study their Headquarters Building. It was suggested that the auditor present a cost estimate of the project over a ten-year period for consideration in finalizing a decision. After considerable discussion, the Board moved that the Executive Committee and Building Committee be given the responsibility of forming a definite recommendation to be presented to the Board of Trustees.

A recommendation to have the 1972 KMA Interim Meeting changed from Cumberland Falls to Somerset was approved by the Board. A motion was then approved that the goals of the Subcommittee on Drug Abuse be approved as submitted. Following this, the meeting was adjourned.

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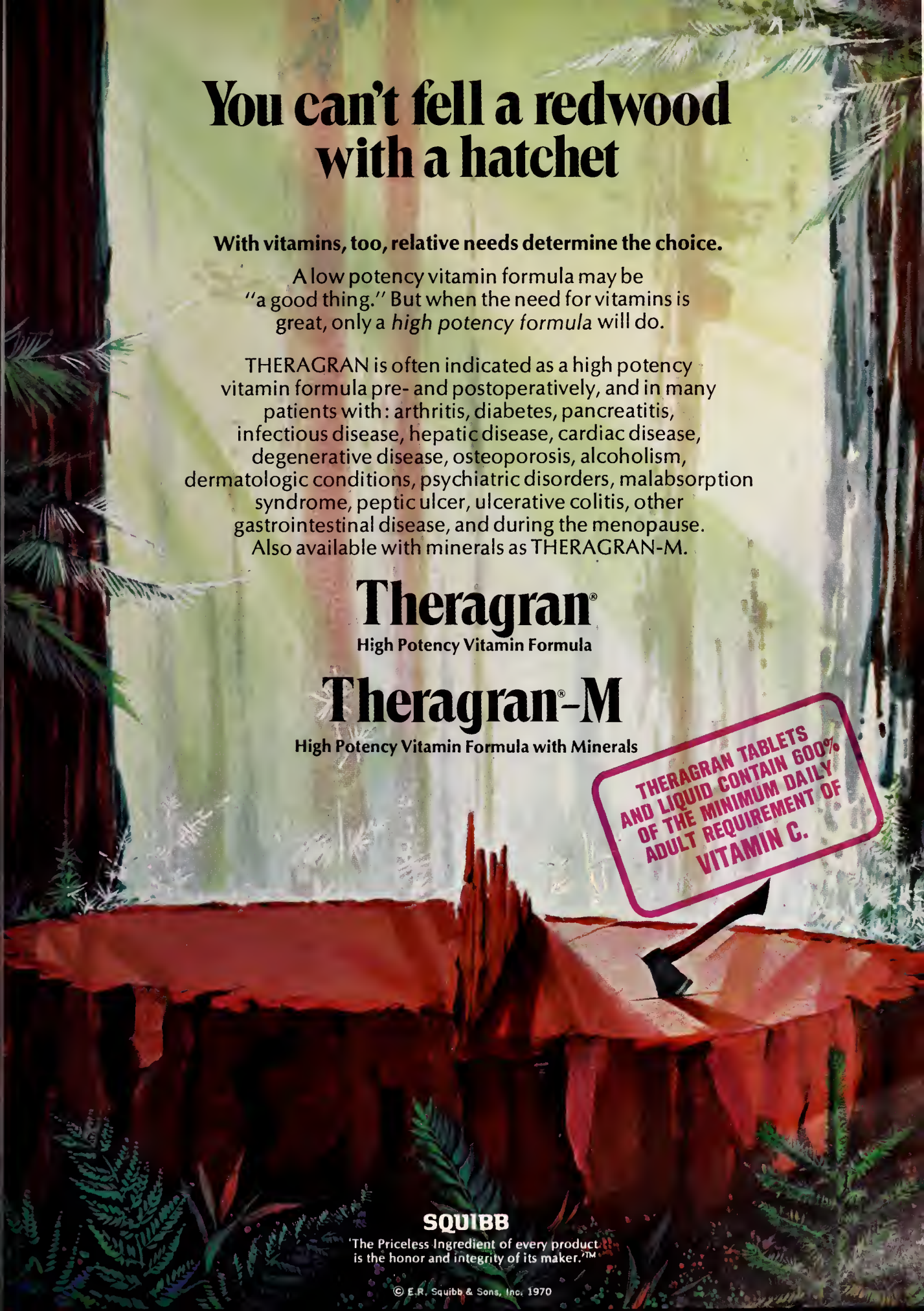
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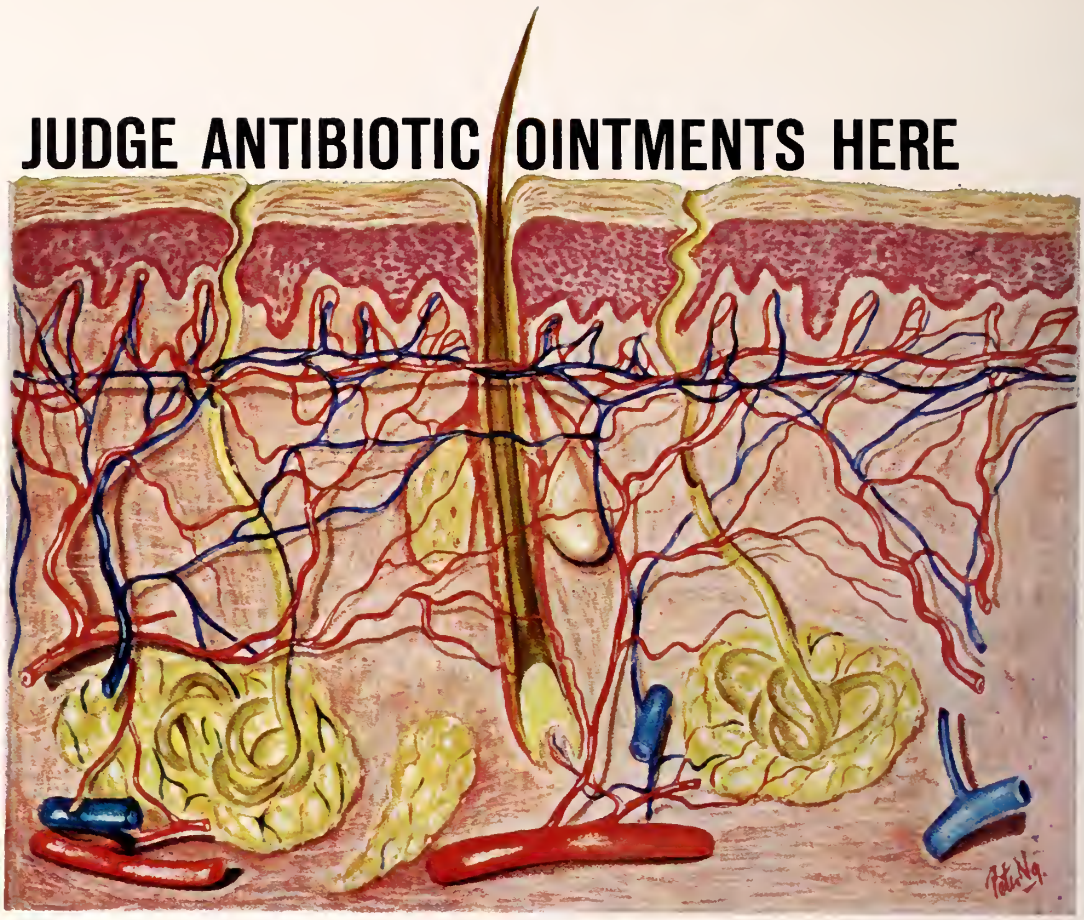
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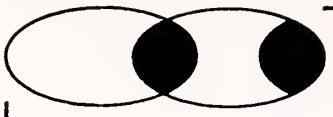
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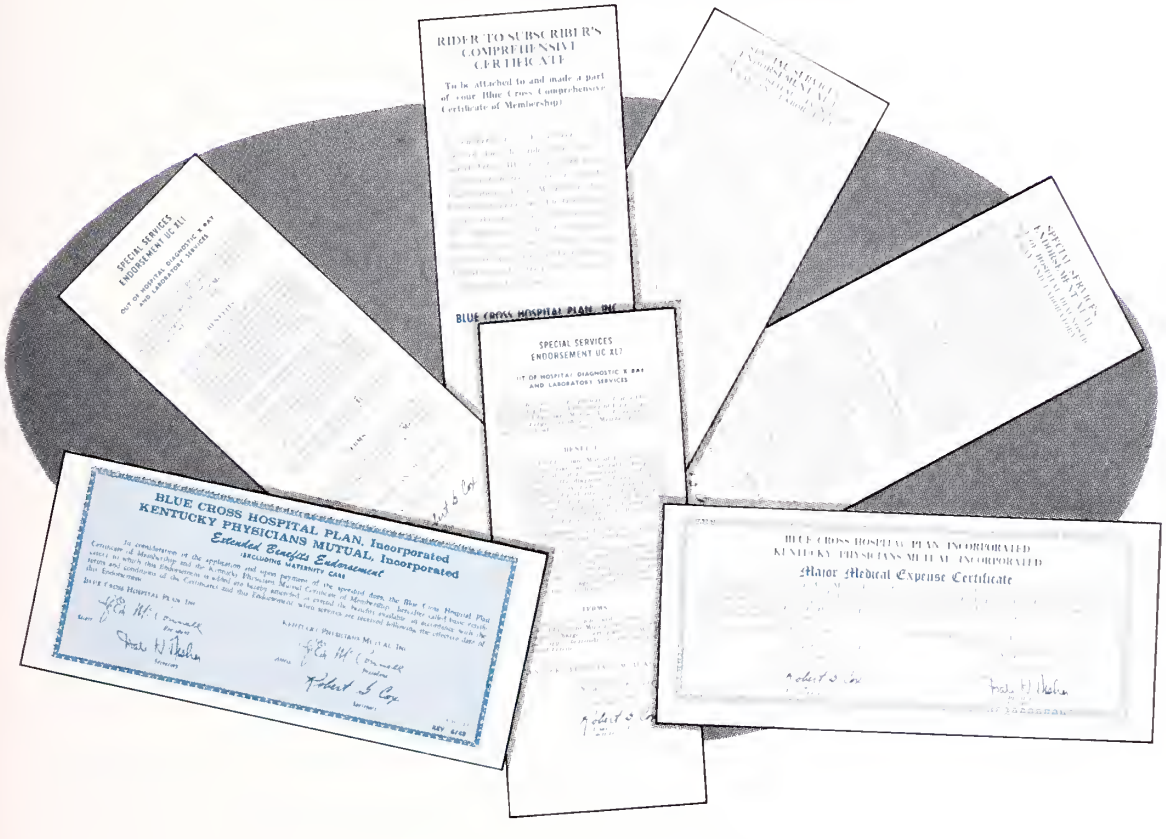
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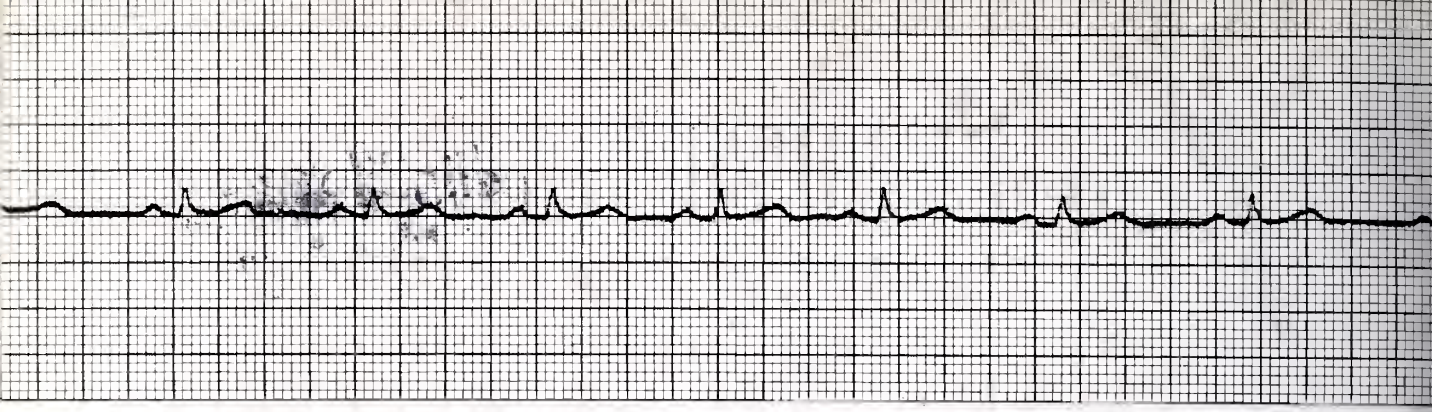
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

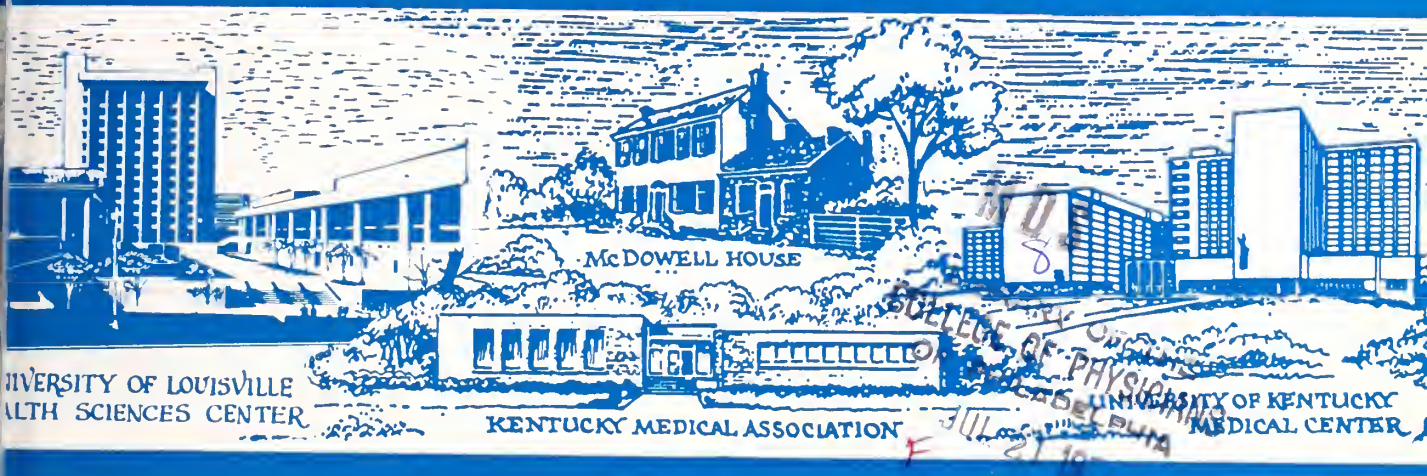
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VOLUME 69 JULY 1971 NUMBER 7

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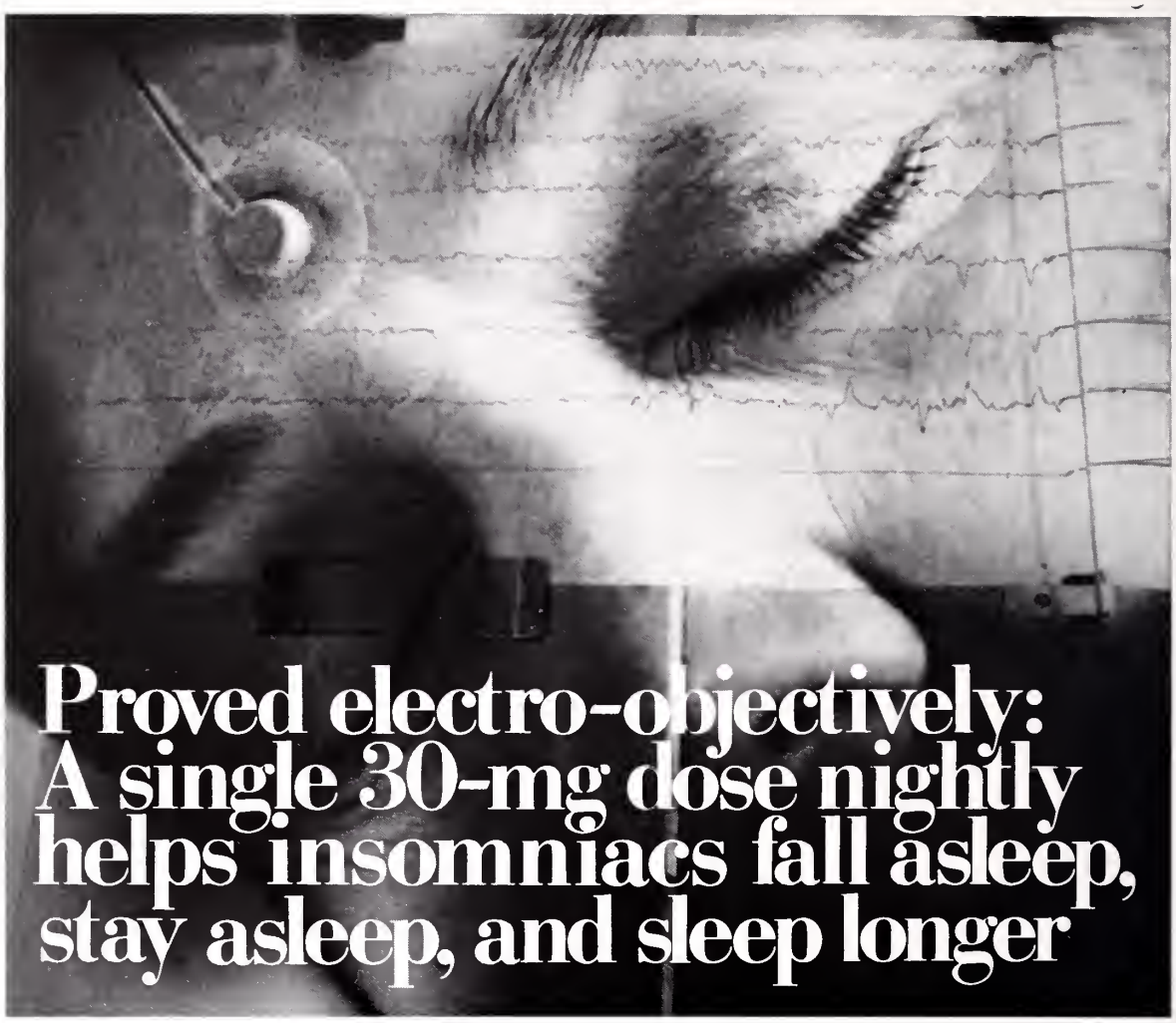
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KMA 1971 Annual Meeting
September 21-23
Convention Center, Louisville



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,' Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

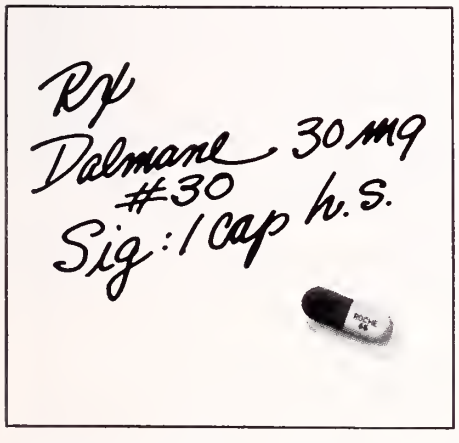
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.:* "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.:* "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

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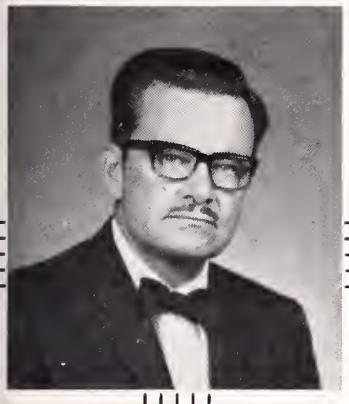
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MESSAGE FROM THE PRESIDENT



Education

WE hear with increasing frequency and loudness that more physicians must be turned out in order to meet the demands of an exploding population. If the profession agrees with this premise, then we, in the interest of medicine's future, must do much in the way of changing educational policies to bring in new types of applicants for medical training. We will need more medical school aspirants from the other sex, as well as from minority ethnic, color, and social groups.

It would be hoped that in the process of producing more physicians, we would produce graduates who would return to their own areas to share the results of their productivity with the areas and peoples from which they emanated. This could help greatly with the problem of distribution of medical manpower.

Before this is possible, it seems imperative that the quality of basic education available to all groups should be of a top-notch quality, so the medical schools would be able to admit students on the basis of academic attainment rather than on the political fact that the applicant was from a socially deprived family or area (as has been suggested) or certain color or ethnic backgrounds.

To meet these requisites for more, and more diverse, medical manpower, there must be drastic changes in our primary educational system. We have heard too much recently concerning the benefits of reaching a particular level in education (namely, that a college graduate earns so much more than a high school graduate or a drop out). I am sure that most of us, as physicians, have seen too many young social misfits caused by the child's inability to meet the arbitrary standards of education set up by his parents or society. (I mean the young bleeding ulcers, tension headaches, drug users, etc., who are ineffective at any level because of inability to compete at some prescribed level.)

If the primary educational system will adjust to developing every child to the peak of his inborn capacities, encourage him to the hilt in order not to lose his enthusiasm and responsiveness, then when his level of learning has been reached, lateralize his training so he can reap the most from his training, with dignity—then we will have fewer in the welfare lines and more potentially great and creative physicians—and waitresses—and mechanics—and plumbers—and school teachers —and congressmen—and presidents. . . .



Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

JULY

21-22 Postgraduate course, "Practical Problems in the Use of Drugs in Family Practice," Kentucky Academy of General Practice, Lake Barkley

SEPTEMBER

16-17 Postgraduate course, "Abnormal EKG in the Absence of Heart Disease," American College of Cardiology, University of Kentucky College of Medicine, and Indiana University School of Medicine, University of Kentucky Medical Center, Lexington

21-23 Annual Meeting, Kentucky Medical Association, Seelbach Hotel and Convention Center, Louisville

NOVEMBER

4-5 Fifth Annual Newborn Symposium, "Hematological Problems in the Newborn," Department of Pediatrics, University of Louisville. For further information write: Billy F. Andrews, M. D., Professor and Chairman, Department of Pediatrics, 226 East Chestnut Street, Louisville, Kentucky 40202

IN SURROUNDING STATES

AUGUST

24-26 Postgraduate course, "The Ideal Practice: Current Trends in How to Achieve It," University of Tennessee Division of Continuing Education and Memphis Regional Medical Program, held at Wassell Randolph Student Center, Memphis, Tenn.

29-30 Thirty-first Annual AMA Congress on Occupational Health, Jackson Lake Lodge, Grand Teton National Park, Wyoming

OCTOBER

4-9 Postgraduate course, "Laryngology and Bronchoesophagology," Department of Otolaryngology, University of Illinois Medical Center, held at University of Illinois Hospital Eye and Ear Infirmary, Chicago, Ill.

8-9 Postgraduate course, "Otolaryngology for the Family Physician," Department of Otolaryngology, University of Miami School of Medicine, Miami, Florida

16-21 Fortieth Annual Meeting, American Academy of Pediatrics, Chicago, Ill.

18-22 Fifty-seventh Annual Clinical Congress, American College of Surgeons, Atlantic City

24-28 Third Annual Fall Scientific Assembly (37th Annual Meeting), American College of Chest Physicians, Philadelphia, Pa.

NOVEMBER

12-17 Southern Medical Convention, Miami, Florida

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their summer and fall meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can to avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

MEDICAL SCHOOLS

Department of Pharmacology
Health Sciences Center
University of Louisville

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

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★ ★ ★ ★ ★

The broad general goals of the Department of Pharmacology are in keeping with the guidelines set by the University. These consist of providing instruction, acquisition of new knowledge through research, and providing community service. The Department serves as a basis for gathering and dispensing information related to the general field of Pharmacology, and has an active research program in several areas of Organ-System Pharmacology, including Neuropharmacology, Endocrine Pharmacology, Cardiovascular Pharmacology, Renal

Pharmacology, and Drug Transport. There is also an active research program on lens metabolism with a special interest in cataract development.

The Department dispenses knowledge through its three major teaching responsibilities: the Medical School, the Dental School, and the Graduate School of the University. In the Medical School, both core and elective subjects are presented to the students. The elective course topics cover such areas as Cardiovascular Pharmacology, Principles of Drug Action, Applied Pharmacology, Neuropharmacology, and Medicinal Chemistry.

Junior dental students receive instruction in Dental Pharmacology and Dental Therapeutics. A general survey of Pharmacology is also given to students in the Dental Hygiene program.

Teaching responsibilities in the Graduate School include the supervision of research projects by graduate students of the Department. In addition, there are a number of graduate level courses and seminars offered especially for the predoctoral and postdoctoral students.

A general survey course in Pharmacology is also available to undergraduate students enrolled in the College of Arts and Sciences. This course is especially designed to bring knowledge about the actions of chemicals on living organisms. In particular, it stresses over-the-counter drug preparations and their actions, drug-abuse as a sociological problem, and presents an overview of the pharmacology of our environment.

In addition, the Department maintains an active file of major journals in its field and, through the excellence of the Health Sciences Center Library, has access to the world literature. Numerous seminars are given by department members, consultants, and guests. These not only cover the research interests of these individuals, but serve to coalesce the existing knowledge in special fields.

The past year has seen the development of a strong interest in drug-abuse, and a laboratory for drug identification has been established. This laboratory has allowed the Department to provide a major service to law enforcement in Louisville and Jefferson County. In addition, this service has been extended to physicians of this area who believe that symptoms might be related to drug-abuse. It is hoped that this pilot laboratory can be properly financed so that a center of toxicology can be developed in our urban area.

The discipline of pharmacology has had an astronomical growth during the past 15 or 20 years. We have learned much about structure-activity relationships, absorption, and distribution of drugs in the body and, in particular, the influence of these factors on the efficacy and toxicity of chemical substances. Further, in recent years, drug interactions have become a major problem to the physician. The adverse drug reactions and toxicities produced by drug interaction is increasing daily. The improvement in knowledge about these interactions has provided the Department the ability to present information on a primary and continuing education basis. The aspects of genetic factors on drug responses has also received much attention in the past ten years, and a number of important idiosyncracies that cause adverse reactions and death have been identified. The collection and presentation of this type of knowledge offers a service to the student and physician that can be lifesaving.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 37. This 28 year old married, white gravida 5, para 4 had an EDC of January, 1968, and had twins proven by x-ray. She had been hospitalized on numerous occasions with nausea and vomiting, as well as episodes of false labor. She was admitted to the hospital at 2:45 a.m., January 3, with a history of leaking amniotic fluid since 5:20 p.m., January 2. Contractions began around 11:30 p.m., January 2, occurring about every nine minutes when she was admitted.

Physical examination revealed pulse 92, blood pressure 130/90, temperature 98.8. She had a grade two systolic ejection murmur, heard best at the second and third interspaces and 2+ edema of the ankles. The abdomen was tremendously distended, and fetal heart tones were heard in the right upper and left lower quadrants. The cervix was two centimeters dilated. Contractions timed by the nurse occurred at seven-nine minute intervals, and were of mild to moderate strength.

A sterile vaginal examination was performed at 11:30 a.m., January 3. The Nitrazine test was positive, and she had a slight bloody show. She was checked vaginally again at 7:30 p.m. and found to have a frank breech presentation. The cervix was five-six centimeters dilated—one station. Contractions were not considered good and the progress of labor was slow. X-rays were obtained to rule out any unsuspected abnormal lie. No distal femoral or proximal tibial epiphysis were seen, but it was felt the infants were near term. The first infant was a breech presentation and the head of the second infant was in the left side of the abdomen.

At 12:20 a.m. on the fourth of January, she was taken to the delivery room. She had an episode of hypotension around 2:00 a.m. This was felt to be supine hypotensive syndrome due to compression of the inferior vena cava. She was placed in the left lateral decubitis position; this helped somewhat. She had no respiratory difficulties, but was cold. She was given oxygen and about 500 cc of Ringer's lactate IV, fairly rapidly. She then became more alert and her skin warmer. Her blood pressure returned to the range of 90-110 systolic; however, her pulse remained rapid at 140-170 per minute.

The progress of her labor remained very slow; but at 3:47 a.m., using a pudendal block and midline episiotomy, a seven pound male infant was delivered by assisted breech. The infant never had any respiratory efforts. There were three loops of cord around the neck, which was assumed to have produced the infant's death by strangulation. The patient was hypotensive at the time of delivery and her pulse was 160-190.

Vaginal examination revealed the second infant was a transverse lie. The second infant's head was maneuvered into the pelvis and the membranes were artifcially ruptured, after which the head remained in the pelvis. Fetal movements were detected; however, the nurse was unable to hear the fetal heart. A Pitocin infusion was started to facilitate delivery of the second infant presenting in a ROT position. The patient was moderately hypotensive, with a pressure of 90; her pulse remained at 160. A forceps rotation was used to shorten the second stage, and a seven pound stillborn infant was delivered. The Pitocin infusion was opened and the placenta was delivered after 35 minutes.

Shortly thereafter, the patient had an episode of uterine atony. This responded to uterine massage plus increasing the Pitocin. Her blood pressure remained between 90 and 70, and the severe tachycardia remained. During this period she had no respiratory difficulty; her nail beds were pink, her skin warm, and her sensorium clear. She had another episode of uterine atony, and it contracted with the Pitocin increased to 20 units per 1000 cc Ringer's lactate.

Around 7:00 a.m., January 4, she was found in shock with a large number of clots and blood in the bed. One thousand cc Ringer's lactate was rapidly given, and uterine massage used, in addition to 0.2 mg Methergine IM. Her blood pressure was obtained around 90 systolic and her pulse was 140. She was typed and crossmatched for two pints of blood.

The possibility of a ruptured uterus versus retained placental tissue was entertained and, at 10:45 a.m., under light anesthesia for intrauterine examination, a moderate sized piece of placental tissue was discovered. The patient bled profusely after the residual placental tissue was removed; and the uterine atony that ensued didn't respond to bimanual massage, packing, and oxytoxics.

She was immediately taken to surgery, and after she had received two units of blood, a total abdominal hysterectomy was performed. There was no uterine defect. She was transfused five units of blood and four grams of Fibrinogen. Around noon her blood pressure was 90 systolic; she was breathing spontaneously. Her skin color was beginning to look

better and she was semi-conscious. Around 2:00 p.m., she became cold and pale. At 2:15, she appeared slightly cyanotic in the nail beds. After 2:40 p.m., no blood pressure could be detected. She received one per cent neo-synephrine, and Hydrocortisone 100 mg was given IV. She ceased breathing at 3:21 p.m. There was no autopsy. The final diagnosis was: Intra-uterine twin pregnancy, uterine atony, post partum hemorrhage. Operation: Total abdominal hysterectomy and multiple blood transfusions.

Comment

It is difficult to know the exact cause of death in this case, since no autopsy was performed. However, it was classified as a direct obstetric death with preventable factors on the part of the physician. Several comments are in order.

Following the examination at 11:30 a.m., January 3, nothing was done again until 12:20 a.m. the next morning or approximately 13 hours later. This is indefensible delay. Either oxytocin stimulation or Cesarean section should have been performed, rather than allow labor to continue in this fashion. There was delay in the delivery room, since the first infant was not delivered until 3:47 a.m. There was an episode of hypotension at 2:00 a.m. which was explained as supine hypotensive syndrome and undoubtedly was. However, this is good evidence for things not going well, and this episode should have alerted personnel to possible further trouble.

It is quite likely that the first infant died at the time of the hypotension. It is also likely that the patient had a concealed abruptio placenta at that time, since she began to manifest signs and symptoms of shock. At the time of delivery of the first infant, she was hypotensive with a marked tachycardia. This again is evidence for great concern and should have alerted personnel attending her.

The time of delivery of the second infant is not given; however, the interval must have been longer than acceptable since oxotocin infusion was necessary to stimulate labor to bring about delivery of the second infant. It has been a general rule, for many years, that the death rate of second twins doubles each 15 minutes after the first 15 minutes delay from delivery of the first infant. Version and extraction of the second infant would have been a better procedure in terms of saving the infant's life. However, it may have been dead already from the same hypotensive syndrome that killed the first infant. Secondly, it is inadvisable to do this type of operative obstetrics without adequate anesthesia and help.

The placentas were not delivered for 35 minutes following delivery of the second twin. This is a little longer than usual, particularly in a patient in whom there has been some difficulty. Manual removal of the placenta should have been performed, and at the same time, the uterine cavity should have been explored for defects or retained fragments. In view of what subsequently occurred, this was mandatory.

The episode of uterine atony is, of course, expected in a patient who had a massively distended uterus with 14 pounds of baby plus amniotic fluid. The uterus didn't perform well during labor and could not reasonably be expected to contract well afterwards. It is a very good rule to have blood typed and crossmatched ahead of time in all patients with twins, in order that there be no delay should atony occur. She had a second episode of uterine atony sometime relatively soon after delivery, and it must be estimated that she lost at least 1000 cc of blood during these two episodes. When this type of uterus bleeds, it is massive.

At 7:00 a.m., she was found in shock again with a large pool of blood in the bed. Estimated blood loss then must have been close to 3000 cc, and still no replacement was given. When crossmatching was done, it was done for only two units, which obviously was not enough. The possibility of a ruptured uterus or retained fragments was not entertained until 10:45 a.m., which is a four hour delay from her third episode of hemorrhage. This is an inexcusable delay. It is made even worse, of course, since had examination been performed on the delivery table, this could have been avoided.

Treatment of the unresponding uterine atony was, of course, correct. The patient should have had a hysterectomy, and this was done. She was given five additional units of blood, totaling seven. This represents about 3500 cc, and really was nowhere near the amount lost before and during surgery.

Her estimated blood loss must have been at least 5000 cc, and she did not receive adequate replacement.

There is no mention of a clotting defect, and yet 4 gms of fibrinogen were given. This may have been helpful, but does not appear to have been. Fibrinogen is a relatively dangerous drug, with a serum heptitis rate following its administration of 20 per cent or greater. It should not be given unless a clotting defect has been demonstrated. This can best be done by putting a tuble of blood aside somewhere and observing for clot formation. If none forms by ten minutes, a defect is suspect.

The terminal episode is very difficult to figure out. It undoubtedly was due to blood loss and, again, none was being given at the time she died. Without an autopsy, a cause of death cannot be given, but probably was heart failure secondary to blood loss. She did have a heart murmur which may have been involved. It is, of course, possible that she had a mild form of either congenital or rheumatic heart disease, which was well compensated until stressed by this massive blood loss.

Amniotic fluid embolus is a possibility, but with a very desultory labor, unlikely. Also, the terminal event would have been a bit earlier had this been amniotic fluid embolus.

To summarize then, this patient suffered most of all from lack of attention and lack of recognition of the amount of blood loss which was taking place. She never received adequate replacement. If the heart murmur had been detected earlier in pregnancy, it would have been wise to have this checked out by a cardiologist. The minimum would be an x-ray for heart size and an EKG.

It is, of course, inexcusable that the infants died as well. They could have been saved by good care for the mother.



SPECTROSCOPIC APPROACHES TO BIOMOLECULAR CONFORMATION, A Symposium, Northern Illinois University, DeKalb, Illinois, June, 1969: edited by Dan W. Urry; published by the American Medical Association, Chicago, 1970; 314 pages; price, $15.00.

To many, including some within its membership, the American Medical Association is a monolith devoted to the regulation of medicine. This book is a subtle demonstration to the contrary. The symposium from which the papers are taken was concerned with one of the most important and fastest developing areas in biological science—the interface between chemistry and biology as represented in the spacial arrangement of complex biologically active molecules. The immediacy and vitality of the topic is indicated by 65 per cent of the cited references postdating 1965, and 31 per cent since 1968.

The seven contributors to the symposium give an honest and straight-forward account of how several sophisticated tools of chemical spectroscopy can contribute to an understanding of the conformational (i.e. three dimensional) structures of very complicated molecules. The coverage includes ultraviolet spectroscopy (M. Maskowski, Jr.), linear response theory and biopolymer optical properties (W. Rhodes), fluorescence spectroscopy (G. Weber), optical rotatory dispersion and circular dichroism (D. W. Urry), infrared spectroscopy (S. Hanlon), Mössbauer spectroscopy (P. G. Debrunner), and high resolution nuclear (proton) magentic resonance spectroscopy (Doctor W. Urry and M. Ohnishi). The authors are careful to point out the types of information to be derived from the method at hand, and, more importantly, the limitations when involved in detailed studies of complicated structures. Most of the essays deal with a particular application of the technique under discussion; the majority deal with peptides. As may be expected, the peptides considered more often than not have current or previous drug importance. The in-depth approach to molecular structures reflects the most modern approach to drug design, wherein the conformational structure at a biological receptor site becomes one of the dominent factors in therapeutic agent development. The authors do their best not to compromise topical theoretical development. For the most part, a degree of previous exposure is required of the reader, and, in at least one instance, familiarity with the Hamiltonian is obligatory.

This symposium transcript accurately represents the concerns of medical research at a level much removed from contemporary medical practice. It is, however, deeply involved with factors that will determine how, and with what agents, medicine is to be practiced by the next generations of physicians.

CHARLES H. JARBOE, PH.D.

SURGERY AND BIOLOGY OF WOUND REPAIR: by Erle E. Peacock, Jr., M.D., and Walton Van Winkle, Jr., M.D.; published by W. B. Saunders and Company, Philadelphia, 1970; 630 pages.

Within the last decade, intensive studies have had an enormous impact on our understanding of wound healing. Fundamental concepts are being brought into sharp focus, and many of the major problems are being reduced to the molecular biology level. From these studies, a better understanding of the complex problems associated with this subject should result in an improvement in the understanding of the normal and abnormal occurrences of healing in surgical patients.

Doctors Peacock and Van Winkle have recorded recent breakthroughs in basic research. They have successfully discussed the basic biological processes of healing in a very readable form for students, residents, and the practicing surgeon.

The first portion of the book discusses inflammation, epithelial formation, contracture, and the biochemistry of wound healing. The latter portion of the book deals specifically with the repair and healing of all types of tissues and organs as related to specific surgical problems. The chapters on the repair of skin and wound incisions and the treatment of burns are outstanding.

In these days, when scientific writing has become so stylized as to completely remove the personality of the author, it is an interesting change to read this book. It is a well balanced presentation covering a wide range of pertinent topics. Fortunately, the book includes the personal opinions of the authors. This is an approach, in my opinion, necessary to leave the reader less confused by the presentation of complex data.

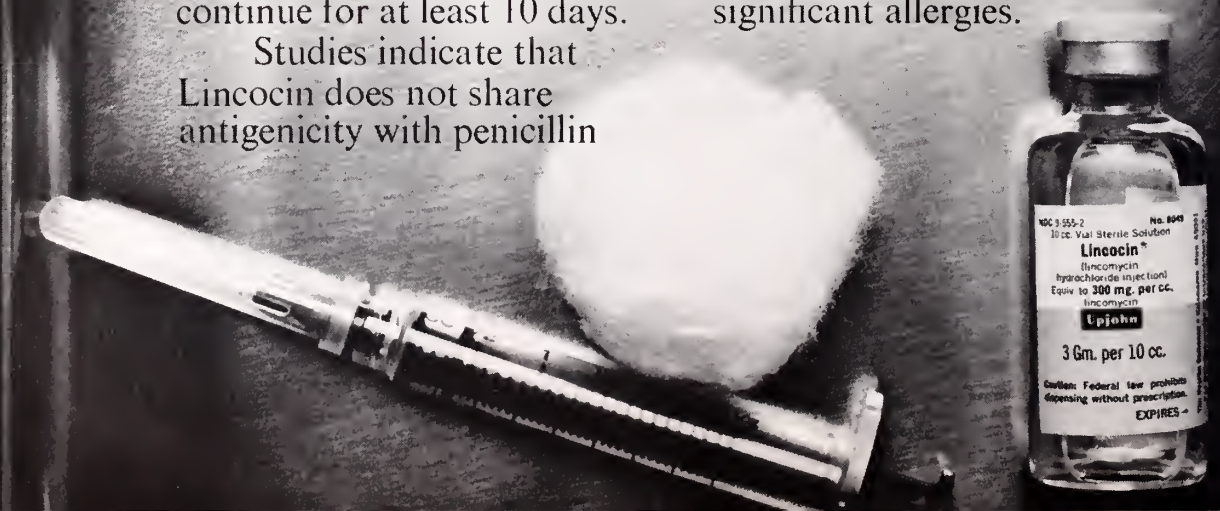
NORTON G. WATERMAN, M.D.

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Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



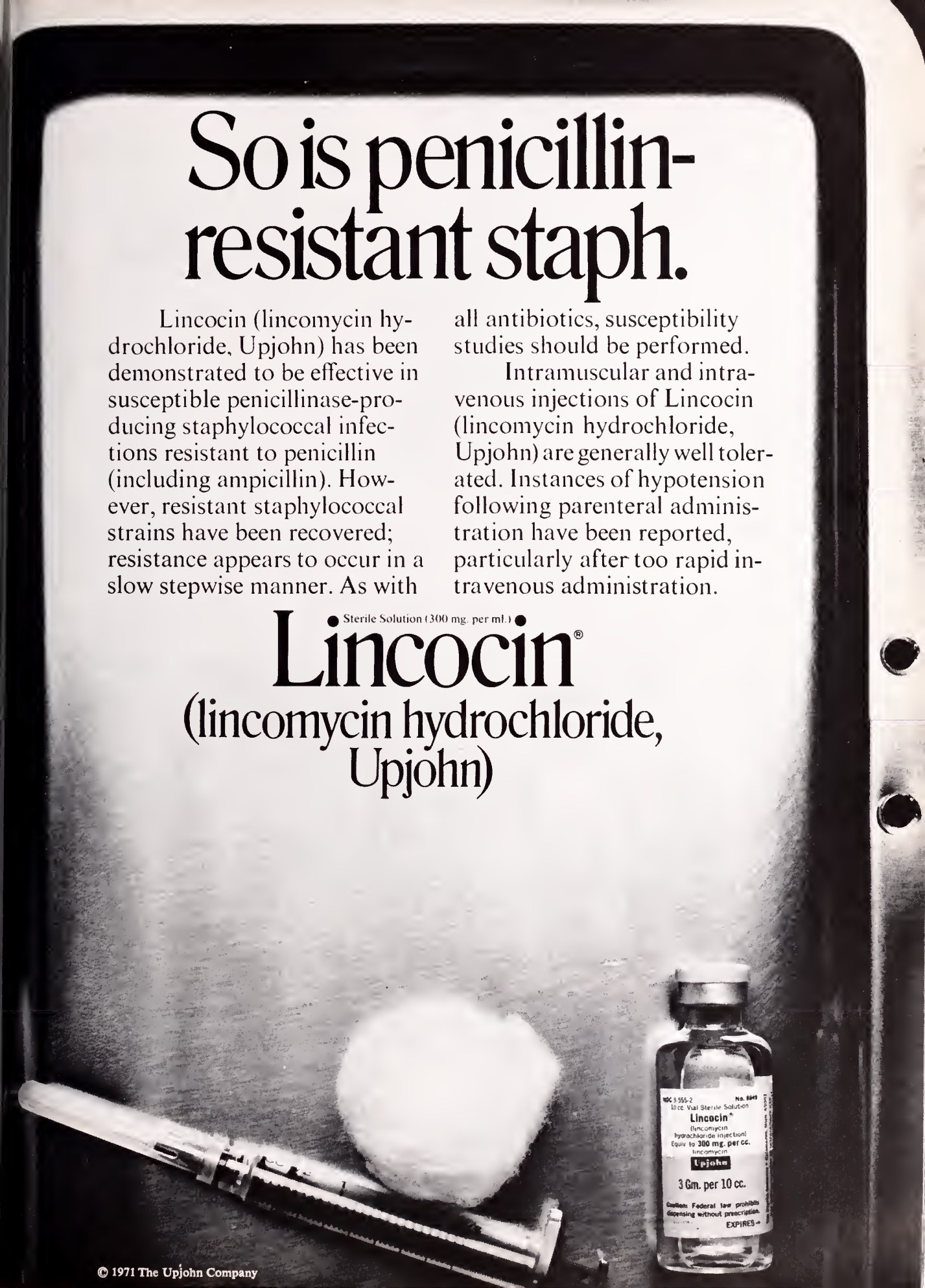
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Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

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500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypot- sion following parenteral administrat have been reported, particularly after t rapid I.V. administration. Rare instan of cardiopulmonary arrest have been ported after too rapid I.V. administrati If 4.0 grams or more administered I. dilute in 500 ml. of fluid and adminis no faster than 100 ml. per hour. *Lo reactions*—Excellent local tolerance de onstrated to intramuscularly administe Lincocin. Reports of pain following jection have been infrequent. Intra- nous administration of Lincocin in to 500 ml. of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

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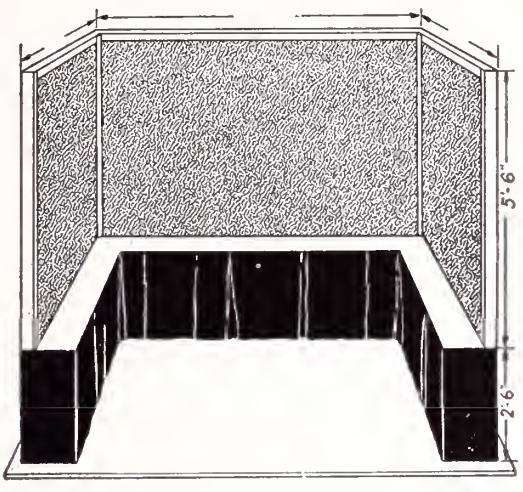
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Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient indi-



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Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

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Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

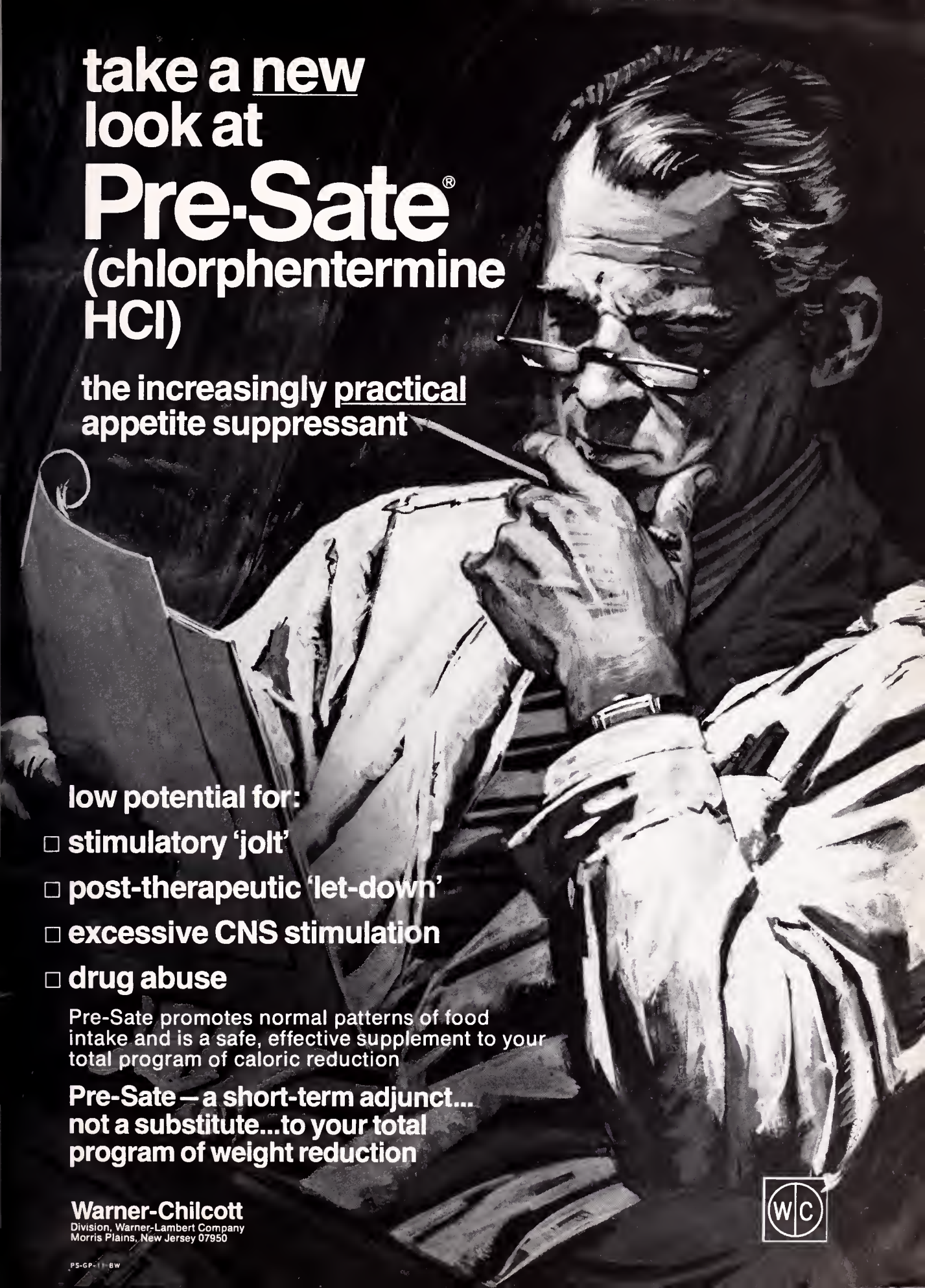
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

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Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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Insect Sting Hypersensitivity and Its Management

RODGER J. ZWEMER, M.D.,* AND N. I. HANDELMAN, M.D.**

Louisville, Kentucky

A review of the subject and presentation of the authors' experiences with hymenoptera insect sting reactions, including an outline for local and emergency treatment and long-term management. The article emphasizes the excellent results obtained by hyposensitization.

ALL physicians should be aware that certain persons, unfortunate enough to be stung by one of the hymenoptera family of insects—bees, wasps, hornets, and yellow jackets—can demonstrate hypersensitivity and have a generalized reaction that is potentially fatal. These persons develop sensitivity to one or more specific protein components found in the insect's venom or body parts. Generalized reactions occur more frequently in allergic individuals, but can also occur in the non-allergic person.

Fatalities due to venomous animals for the period 1950-1959 were reported by Parrish;[1] his findings indicate that more people die each year from bee stings than from snake bite. This study also showed that Kentucky had the greatest number of deaths per million population of all the United States.

In the past two years, there have been two deaths due to insect sting reaction reported in Kentucky. Both occurred in males, a nine year old boy and a 72 year old man. It is possible that there may have been additional deaths caused by insect sting that went unrecognized and were mistakenly reported as heart attack, stroke, or the like.

Symptomatology and Immunology

Insect stings usually cause local pain and inflammatory swelling. Allergic reactions can be mild, such as increasing local reactions from successive stings or associated generalized urticaria and angioedema. More serious allergic reactions are manifest as anaphylaxis of varying degree with respiratory symptoms of laryngeal edema, wheezing, dyspnea, and tightness of the chest with or without loss of consciousness and vascular collapse and potential fatal outcome.

It usually is not difficult to differentiate these symptoms from those reported, such as syncope and shortness of breath without wheezing or glottic edema, which are probably psychogenic in nature. When a person receives multiple stings, he or she can experience toxic symptoms of cramps, vomiting, and diarrhea, which should not be interpreted as allergic in origin. In rare instances, neuritis, encephalitis, classical serum sickness, and intravascular clotting, similar to the Schwartzman phenomenon, have been reported as sequels to hymenoptera insect sting.

The venom of these insects has been analyzed by several investigators,[2, 3] and it has been fractionated and found to contain a hemolytic enzyme, a histamine releasing factor, at least two neurotoxins, serotonin, and a kinin.

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Several of these substances are factors in the production of pain and local swelling; and with multiple stings, can produce systemic toxic signs. In contrast, however, there are certain people who have generalized "allergic reactions" from just a single sting.

The hymenoptera group of insects have been shown to exhibit some antigenic cross reactivity. Not all of these antigens are common to each other or all species. Therefore, it is possible for a person to be senstive to one or more species; this helps to account for the reported variation of reaction that can occur from subsequent stings. Fright, unconsciousness, and lack of knowledge of insects make identification of the culprit difficult at times and hampers the accuracy of clinical studies.

We recently reviewed our experiences with serious allergic reactions to insect stings in 87 treated patients. Questionaires were sent out; and office visits resulted in follow-up study on 65. Treatment results that were obtained were considered excellent and compared well with excellent treatment results reported by others.[4, 5] For this reason, it is felt that all practicing physicians should be made aware of available treatment and management in handling these allergic insect sting reactions.

Our group of patients was evenly divided among allergic and non-allergic persons. Since allergic individuals comprise about ten per cent of the general population, these statistics would indicate that the allergic individual is more vulnerable. In addition, it was noted that the sooner the onset of a reaction after a sting, usually the more severe the allergic reaction.

Pathology

Autopsy studies[6] done on insect sting fatalities have shown that angioedema in the respiratory tract is the most common lesion, and results in respiratory obstruction. Some patients manifested primary vascular engorgement or coronary occlusion. There have been a few reports of nervous system involvement evidenced by meningeal edema and vacuolization of the white matter. As one would imagine, the respiratory deaths usually occurred within a short interval after the sting; whereas, those ascribed to nervous system involvement, were somewhat delayed, up to several days.

Local Treatment

1. Removal of stinger, which is present only when stung by a bee. The stinger should be carefully scraped off with fingernail or blade, and not picked up by forceps which may squeeze out more venom into the site.

2. The site of the sting should be washed with soap and water; ice packs can be used to lessen local swelling.

3. Antihistamines are useful antipruritics, but do not appreciably lessen the reaction.

4. Infection, gangrene, and neuritis, which sometimes occur as a complicating factor, may require additional appropriate local care.

Systemic Emergency Treatment

1. Sympathomimetic drugs are the drugs of choice in any immediate hypersensitivity reaction, and this is no exception. Epinephrine is the best drug to use; it is given at an appropriate *dose of 0.01 cc/Kg of 1:1000 aqueous solution injected sub-cutaneously,* to be repeated at ten to 20 minute intervals. Epinephrine aerosol preparations have been used if the patient is conscious, but a recent study[7] has shown that this mode of administration is much inferior and less effective in combating shock. Isoproterenol, either orally as a linguet 10 to 15 mg or as an aerosol preparation, can also be used. There is question raised as to the value of this drug, because it has little, if any, pressor activity and would not be of much benefit in case of shock.

2. Every effort should be made to maintain an open airway; and, on occasion, tracheostomy and supplemental oxygen may be indicated.

3. When the sting has occurred on an extremity, a tourniquet may be applied to delay absorption of the venom.

4. If bronchial spasm is severe and not significantly relieved by the sympathomimetic drugs, then intravenous aminophylline should be given at a *dose of 4 mg per kilogram slowly over a fifteen to thirty minute period.*

5. Steroids, such as prednisone or equivalent,

are of value for general support and suppressing inflammatory response; but they afford little, if any, immediate benefit in treating the anaphylactic reaction.

Long Term Management

Persons who are hypersensitive to insect stings should be provided with an emergency kit that can be used in the event of a sting and subsequent reaction before other medical aid can be obtained.

The kit should contain a tuberculin syringe with a 26 guage needle, an ampule of 1:1000 aqueous epinephrine, and instructions for dose and use *(.01 cc/Kg of 1:1000 solution subcutaneously)*. Isoproterenol linguets 10 or 15 mg can be included for oral medication. It is our practice not to recommend Epinephrine aerosol.

It is also important that the hypersensitive individual should have a knowledge of the insects' habits to avoid being restung. They should be aware of the habitats of these insects, e.g., that honeybees like to live in hollow tree trunks or holes; that bumblebees and yellow jackets will live in underground cavities and that they like clover; that hornets' nests are usually on tree limbs; and that wasps' nests are often under eaves, on windowsills, or in bushes.

We also feel that these hypersensitive people should not do lawn or garden work; and that if they are outside, they should not wear brightly colored clothes or perfumes which will attract these insects. When possbile, it is also desirable to have others remove nests that have been found; and, in general, to practice other good insect control.

Most important in long-term management, however, is that insect hypersensitive individuals should be given the benefit of hyposensitization. The results of hyposensitization have been excellent; our experiences are listed and compared with a study reported by the Insect Allergy Committee of the American Academy of Allergy (Table I).

Skin tests are done in our offices, but are not absolutely necessary. They are not completely reliable as a method of determining insect hypersensitivity and are especially likely to be negative if done within three weeks after a sting. In our series, positive skin tests of ++ or greater, using a 1:10,000 or greater dilution, were obtained in 37 of 44 atopic patients, but in only 18 of 42 non-atopic patients. Diagnosis of allergy to insect sting, therefore, is best made on the basis of history alone.

We do skin testing to help determine the patient's degree of sensitivity and to help determine the dose of the initial hyposensitizing injection. We use a commercially prepared extract containing equal parts of bee, wasp, yellow jacket, and hornet bodies and venom for both testing and treatment and in the following manner:

SKIN TEST — INTRADERMAL

1:100,000,000 — if negative in 15 minutes, proceed to
1:10,000,000 — if negative in 15 minutes, proceed to
1:1,000,000 — if negative in 15 minutes, proceed to
1:100,000 — if negative in 15 minutes, proceed to
1:10,000

Further testing of lesser dilution is of academic interest only and not helpful in determining sensitivity or treatment. After skin testing, the weakest dilution of the extract giving a positive intradermal test is used as the starting point for treatment. In instances where skin testing is negative, we routinely begin at 1:100,000 dilution.

If one wishes to forego skin testing, hyposensitization can arbitrarily be begun at 1:100,000,000 dilution with progression through the prescribed treatment schedule.

TABLE I

	AUTHORS' PATIENTS HYPOSENSITIZED	AMERICAN ACADEMY OF ALLERGY HYPOSENSITIZED	AMERICAN ACADEMY OF ALLERGY UNTREATED
Lessened reaction	94%	89.6%	9%
Unchanged reaction	6%	6.6%	26%
Worse reaction	.0%	4%	65%

Following (Table II) is our schedule of hyposensitization. Shots are given at weekly intervals until each patient reaches a top dose of 0.5 cc of a 1:100 dilution or some lesser maximum tolerable dose.

TABLE II
STINGING INSECT SCHEDULE
AQUEOUS

VIAL	CONCENTRATION Wt./Vol.	DOSE
A	1/100,000,000	0.10
	"	0.20
	"	0.30
	"	0.50
	"	0.70
B, etc.	1/10,000,000	0.10
	"	0.20
	"	0.30
	"	0.50
	"	0.70

And increasing concentrations by tenfold to a maximum tolerable dose or 0.5 cc at 1:100 dilution.

When the maximum dose is reached, the patient should then receive a booster dose at six to eight week intervals for a minimum period of three years. We feel that it is wise to continue hyposensitization for a longer indefinite time; because response to stings and treatment are variable, and no one has established the proper length of treatment. We have had experience of recurring hypersensitivity, after discontinuing hyposensitization, because the patient no longer reacted excessively from an insect sting.

Case Histories

Following are three short case histories: one in an allergic child and the other non-allergic, and results of their treatment, and a third case demonstrating recurrence of hypersenstiivity after discontinuing hyposensitization.

Case #1: A 13 year old atopic white male (P.C.) was stung by wasps and bees on four occasions in the summer of 1966. The fourth sting was identified by the parent as a wasp. This sting caused large local swelling and generalized urticaria and facial edema within 30 minutes. He was taken to his physician, who gave him adrenalin and steroids by injection. The urticaria was recurrent for ten days in spite of this treatment. He was seen by one of the authors and skin tested with a combined aqueous hymenoptera extract and gave a +++ intradermal reaction at 1:10,000 dilution. He had positive skin tests to other inhalants and had a history of urticaria from other causes. Both parents are atopic and received specific allergy treatment. Immunotherapy was begun in the routine method with aqueous extract. This has been continued for better than three years.

Two years after beginning his injections, he was stung five times on the arms and legs by wasps on a single occasion, with only mild local swelling resulting. He subsequently was stung on three different occasions by both bee and wasp, with only local swelling.

Case #2: An eight year old, non-atopic, white male (R.E.) was stung on the eye by a wasp in July, 1968, and had local swelling of the periorbital region. One month later, he was stung on the ear; and, in a few minutes, he developed marked facial edema and then became short of breath due to laryngeal spasm and marked wheezing. He was taken to the physician and received successful emergency treatment with injections of adrenalin and Benadryl.

The family history was negative for allergy, and skin tests to hymenoptera extract were negative at 1:10,000 dilution, about one week after being stung.

In December, 1968, after taking hyposensitizing shots for three months, he was again stung by a wasp; he developed mild angioedema, but no respiratory symptoms. In August, 1969, one year after starting treatment, he was restung on the face by a wasp and developed a few urticaria on the face and mild epistaxis. The patient is continuing immunotherapy, receiving an injection every six weeks at the present time.

Case #3: A five year old boy was stung on the face by a honeybee in 1963, and within

ten minutes began to have swelling of the face involving his eyelids and lips and progressed to generalized large urticaria. He had no laryngeal spasm or respiratory difficulty and was seen by his physician, who gave epinephrine by injection with improvement.

Subsequently, he was skin tested and a ++ reaction at 1:1,000,000 strength was noted; he was begun on hyposensitization, using an aqueous mixed extract, which was continued for three years.

In 1966 and 1967, he was stung on two occasions by bees and had only local reactions, and bee sting injections were stopped. He was stung again in June, 1970, by a bee and within 15 minutes had generalized urticaria and angioedema of the face and also mild dyspnea. Hyposensitization treatment has been reinstituted.

Summary

Certain sensitive individuals may respond to insect stings with severe or fatal reactions. These reactions occur most often following a sting from the hymenoptera insect group. Repeat stings often produce progressively more severe reactions. Clinical manisfestations vary from simple local reactions to severe life threatening anaphylactic reaction. When a greater than local reaction occurs, the individual deserves special management. The local treatment involves removal of the stinger and other adjunctive measures. Systemic reactions should be treated with sympathomimetic drugs, mainly. However, prophylactic management against systemic reaction is more important, and the proper program is outlined. Results of treatment and follow-up studies are also reported.

References

1. Parrish, H. M.: Deaths from Bites and Stings by Venoumous Animals and Insects in the United States. *Arch. Int. Me.* 104: 198-207, 1959.
2. Loveless, M. D., and Fackler, W. R.: Wasp Venom Allergy and Immunity. *Ann. Allergy* 14:347-366, 1956.
3. Feingald, B. F., Benjamani, E., and Michaeli, D.: The Allergic Responses to Insect Bites. *Ann. Rev. Entom.* 13:137-158, 1968.
4. Brown, H., and Benton, H. S.: Allergy to the Hymenoptera, *Arch. Int. Med.* 125:665-669, 1970.
5. The Insect—Sting Allergy Comm. Report of the American Academy to Allergy: Insect Sting Allergy. *JAMA* 193:115-120, 1965.
6. Frazier, Claude A.: *Insect Allergy,* Warren R. Green Inc., St. Louis, Mo. 19-144, 1969.
7. Hoehue, J. H., Lockey, S. D., and Chasy, J. D.: Comparison of Epinephrine Excretion After Aerosol and Subeutaneous Administration. *J. Allergy,* 46:336-339, 1970.
8. Mueller, H. L., and Hill, L. W.: Allergic Reactions to Bee and Wasp Stings. *New Eng. J. of Med.,* 249:726-731, 1953.
9. Mueller, H. L.: Serial Intracutaneous Testing for Bee and Wasp Sensitivity. *J. Allergy,* 30:123-129, 1959.
10. Mueller, H. L.: Further Experiences with Severe Allergic Reactions to Insect Stings. *New Eng. J. of Med.,* 261:374-377, 1959.
11. Houser, D. D., and Caplin, I.: Insect Sting Allergy. *Am. J. Dis. Child,* 113:498-503, 1967.
12. McLean, Jas. A.: Management of Insect Sting Reactions. *Modern Treatment,* 5:814-824, 1968.
13. Schwartz, H. J.: Skin Sensitivity in Insect Allergy. JAMA, 194:703-705, 1965.
14. Marks, M. D.: Stinging Insects: Allergy Implications. *Ped. Clinics of North America,* 16:177-191, 1969.
15. Schwartz, H. J., and Kahn, B.: Hymenoptera Sensitivity. *J. Allergy,* 45:87-96, 1970.

Acute Acalculous Cholecystitis with Normal Cholecystogram

Report of a Case

J. Wesley Johnson, M.D., F.A.C.S.

Ashland, Kentucky

Although clinical signs suggested cholecystitis, oral cholecystogram was normal. Following exacerbation of symptoms, laparotomy proved diagnosis of acute gangrenous cholecystitis.

ACUTE cholecystitis is usually associated with stones in the gallbladder. Acute acalculous cholecystitis is quite uncommon. Hoerr and Hazard[1] have estimated that it is less than five per cent of all cases of acute cholecystitis. Acalculous cholecystitis is well documented following trauma or unrelated surgical procedures.[2, 3, 4] Acute acalculous cholecystitis without any antecedent trauma, surgical procedure, or systemic illness is unusual.

Oral cholecystograms are often not obtained in a patient with acute acalculous cholecystitis because of the severity of the illness. When they are obtained, nonvisualization is generally reported. We are presenting a case of a patient who in a three week illness had a normal oral cholecystogram that was subsequently followed by the proven diagnosis of acute acalculous gangrenous cholecystitis.

Case Report

A twenty-six year old female was admitted to King's Daughters' Hospital on March 10, 1970, with acute midepigastric pain radiating to the back. Temperature was 99.6, white blood count 6,000, hemoglobin 10.9, amylase 80 Somogyi units. X-ray studies the morning of March 11th showed a normal upper GI and a normal visualization of the gallbbladder (Figure 1). She was treated with anticholinergics

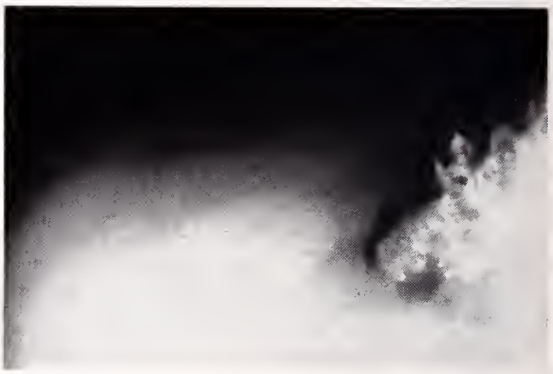


Figure 1

and bland diet and was discharged improved on 3-14-70.

However, six days later another episode of abdominal pain necessitated hospitalization. White count at that time was 4,000 with a normal differential and amylase of 60 units. Again, she was treated with sedation, anticholinergics, and low fat diet and was discharged improved on 3-24-70.

Less than 48 hours later, because of markedly severe right upper quadrant pain and vomiting, the patient was readmitted to the hospital in moderately acute distress. Temperature on admission was 98.6; however, it subsequently rose to 102 over a 24 hour period. White blood cell count on admission was 13,000 with 90 polymorphonuclear leukocytes, nine lymphocytes, and one eosinophile. Her condition deteriorated over the first 24 hours before it stabilized with intravenous fluids and antibiotics. Bilirubin was 1.2 mgs.%, SGO-T 150 units, alkaline phosphatase 95 international

units, and hemoglobin was 10.6 grams. Under this regimen, she then improved and by the fifth day was relatively asymptomatic.

At laparotomy on 4-3-70, the findings were those of a markedly thickened, moderately distended gallbladder with very viscid bile (Figure 2). The cystic duct was thickened, but

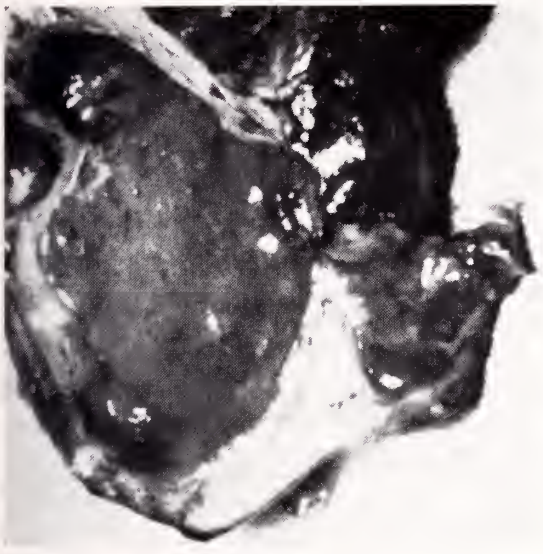


Figure 2

the lumen appeared to have a normal caliber. The common duct appeared normal. Gangrene of the wall was noted to cover approximately a three centimeter area on the gallbladder fundus (Figure 3).

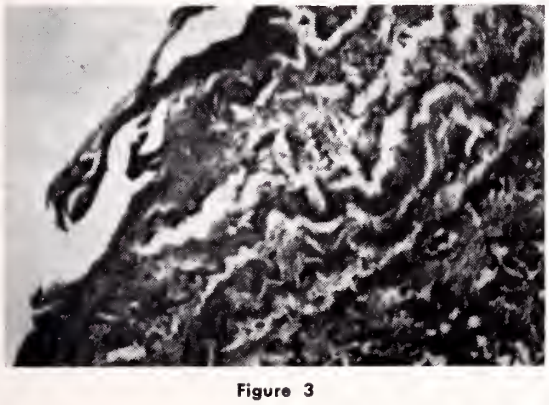


Figure 3

The operative and postoperative courses were satisfactory, and the patient was discharged on 4-12-70. Subsequent follow-up examinations to this date have shown the patient to have done well and remained asymptomatic.

Discussion

This case is reported because it shows that a rather fulminant acalculous cholecystitis may develop in a patient who has recently had normal oral cholecystogram.

Several theories for acute acalculous cholecystitis have been proposed and representative cases reported showing presumptive etiologic factors. The theories were those of noncalculous obstruction, vascular abnormalities, reflux cholecystitis associated with pancreatitis and "common channel theory," and those associated with bacterial infections.

Only the bacterial infection would seem a likely possiblility in this case. However, in view of the intermittent acute symptomatology without fever and with response to only anticholinergics, it seems that possibly some yet unexplained factors may be responsible for acute acalculous cholecystitis.

References

1. Hoerr and Hazard: *American Journal of Surgery* 111:47, 1966.

2. Mandelbaum and Palmer: *Archives of Surgery* 97:601, 1968.

3. Lindberg, Al, and Others: *Annals of Surgery* 171:152, 1970.

4. Robertson, Ralph: *American Surgeon* 36:610, 1970.

Multiple Polyposis Associated with Various Soft Tissue Tumors†

Mauricio Salazar, M.D., and Henry B. Asman, M.D.

Louisville, Kentucky

A case of Gardner's syndrome is presented, illustrating the association of familial multiple polyposis, desmoid tumors, leiomyoma, and dermatofibroma. The clinician should think of polyposis when the patient presents with varied soft tissue tumors.

In 1951, Gardner first described the association of multiple polyposis with osteomatosis and soft tissue tumors. This triad was first called "Gardner's Syndrome" by Smith in 1958. At the same time, he called attention to the association of multiple polyposis with desmoid tumors and speculated that Gardner's syndrome, with its complete triad, is just the "full-blown manifestation of a spectrum of pathologic changes which could affect in variable numbers of combinations."

The following case report is presented because it represents the interesting association of multiple polyposis, desmoid tumor, leiomyoma, and multiple dermatofibroma.

The patient, a 46 year old white male, was first seen in August, 1966, complaining of weakness, fatigue, and of being pale. He was admitted to St. Joseph Infirmary for work-up. Hemoglobin was 6 grams, hematocrit 26.5%. Sigmoidoscopic examination showed numerous sessile and pedunculated polyps scattered throughout the distal 18cm. of rectum and sigmoid. Barium enema and air contrast studies showed innumerable polyps throughout the colon. The remainder of the physical examination and laboratory studies were essentially normal.

Total colectomy with ileo-proctostomy was performed on September 9, 1966. During the abdominal exploration, a tumor mass, 2 cm. in diameter, was excised from the greater omentum. Pathological report was: 1) multiple familial polyposis without malignant change and 2) leiomyoma, possibly arising from the stomach.

In September, 1968, the patient presented with a mass in the left abdominal wall about 10cm. lateral to the previous incision. A "dumbell" shaped tumor was removed, with the larger segment being above the fascia, measuring 15cm. in length by 9cm. in width, and weighing 280gms.; the smaller portion between the fascia and the peritoneum weighed 185 gms. The tumor was totally excised and reported as a desmoid tumor.

In May, 1969, the patient was again seen with a large firm mass in the left abdominal wall. He was readmitted in July; a 5cm. x 5cm. mass was resected from within the rectus sheath. Exploration of the peritoneal cavity showed multiple tumor masses involving the mesentery of the small bowel and a 2cm. mass in the greater curvature of the stomach. Biopsies of all tumor masses were reported as desmoid tumor.

Because of the extensive involvement of the mesentery of the small bowel, no effort was made to remove these tumors.

Aware of Gardner's syndrome, the patient was further studied. Bone survey was normal, but physical examination showed multiple (over 25) dermoid tumors up to 1cm. in diameter. The appearance of all of these

†*From the Department of Surgery, Division of Proctology, St. Joseph Infirmary, Louisville, Kentucky*

tumors was similar. One was excised and reported as dermatofibroma.

With Smith, we emphasize that desmoid tumors seem to develop most commonly in association with an incisional scar, misleading the clinician to believe that this could be a malignant implant. They may also arise "de novo" from extra-incisional areas. The present case is a vivid example.

Conclusion

The association of multiple familial polyposis, desmoid tumors, and other soft tissue tumors has repeatedly been reported. The incomplete triad probably does not rule out the diagnosis of Gardner's syndrome, from the genetic standpoint. The association of multiple familial polyposis with soft tissue tumors and/-or exostomatotic change of bony structure is frequent enough that a patient with either one of these conditions deserves a colon study to rule out multiple familial polyposis.

Bibliography

1. Pierce, Weisbord, and McKusick: Gardner's Syndrome: Formal Genetics and Statistical Analysis of a Large Canadian Kindred. *Clinical Genetics* Vol. 1, No. 2.
2. Smith, W.: Multiple Polyposis, Gardner's Syndrome and Desmoid Tumors. *Diseases of the Colon and Rectum*, September-October, 1958.
3. Smith, W.: Desmoid Tumors in Familial Polyposis. Proceedings (Mayo Clinic), January, 1959.
4. Thomas, Watne, Johnson, Roth, and Zimmerman: Natural History of Gardner's Syndrome. *The Amer. Journal of Surgery*, February, 1968.
5. Wayne, Johnson, and Chang: The Challenge of Gardner's Syndrome. *CA*, September-October, 1969.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

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1971 Student Research Day
University of Kentucky School of Medicine

THE following abstracts are of nine of the 12 papers chosen for presentation on Student Research Day at the University of Kentucky Medical Center.

The three prize-winning abstracts were published in the June *Journal.*

Modified Well Technique: A New Approach to Intra-Uterine Fetal Surgery

Richard G. Banta

THE modified well technique has been evolved for intra-uterine surgery upon rabbit fetuses between the 23rd and 27th days of gestation. A total of 13 does and 16 of their fetuses have been operated upon with successful postoperative viability of seven fetuses. Six of the seven does of these fetuses have been brought to term.

Cannibalism occured in five instances where natural birth was permitted. To eliminate this problem, the last doe was delivered by Cesarean Section, which resulted in the live birth of a fetus with an "in utero" surgically produced diaphragmatic hernia. This newborn was maintained 24 hours prior to sacrifice.

The pregnant does were anethesized by intermittent pentobarbital infusion after previous standardization of this method by monitoring blood gases, EKG, blood pressure, respiration, and temperature loss. The uterus was exposed by the maternal trans-abdominal route. Access was gained to the fetus by the modified well technique, a combination of the uterine window and well techniques. The diaphragmatic defect was created through a fetal trans-abdominal incision. Prior to uterine closure, warm saline was added to replace the 0.2-0.5cc of amniotic fluid which was lost during the procedure.

A satisfactory laboratory model for studying congenital diaphragmatic hernia has been developed in the rabbit fetus. This model for fetal manipulation has now made it possible to enter two major fetal compartments simultaneously for physiological study that can be terminated in the live birth of the experimental fetus.

A Technique For Identifying Vagus Nerve Branches

R. M. Bell

FAILURE of vagotomy to control peptic ulcer disease is partially related to incomplete vagotomy. Leucomethylene blue (LMB), the reduced form of the dye, will selectively stain branches of nerves when applied directly to them. This facilitates the transection of remaining nerve fibers during the performance of either a truncal or selective vagotomy.

In 18 dogs, fasting and insulin-stimulated output of juice and acid was measured, either in sedated dogs intubated per os or in awake with a gastric fistula. The animals were then divided into three groups: I (ten dogs) truncal vagotomy with LMB identification of residual fibers, II (three dogs) truncal vagotomy without LMB identification, and III (one dog) selective vagotomy with LMB identification. The four dogs which died postoperatively are not included in the results. The gastric secretory activity was retested at seven days after operation.

Group I animals had a postoperative insulin-stimulated acid output of .17 mEq HCl/hr, an

88 per cent reduction of the control value of 1.52 mEq HCl/hr. Group II dogs had a post-operative stimulated acid output of .54 mEq/hr, a 64 per cent reduction of the value control of 1.67 mEq HCl/hr, and the single animal undergoing selective vagotomy showed a 96 per cent reduction in acid output. No complications accompanied the use of the drug.

Conclusion: LMB identification of small nerve fibers during vagotomy improves the completeness of vagal denervation of the stimulation.

Factors Affecting Rate of Progression of Azotemia in Acute Renal Failure

Timothy D. Costich

IN patients with acute renal failure, the rate of rise of blood urea nitrogen (B.U.N.) may vary from 10 mg/100 ml/day to 150 mg/100 ml/day. In order to study some of the factors affecting urea production rate in acute renal failure, an animal model was utilized.

Acute uremia was produced in 200 gram male rats by ligation of both ureters through bilateral dorsal incisions. No food or water was given and animals were sacrificed at 48 hours by aortic exsanguination after pentobarbital anesthesia.

Experiment #1

Six rats received, i.p., at 20 and 44 hours a total of 1.5 mEq HCO_3 in 10 ml H_2O; control rats received NaCl. The bicarbonate group pH was 7.317±0.019 (mean±SEM), and control pH was 7.601±0.050 ($p<0.001$). BUN levels were lower in the bicarbonate group (238±8.3 versus 303±18, $p<0.005$). Nine untreated controls had a BUN of 299±17 and a pH of 7.048±0.033.

Experiment #2

In separate experiments, three groups of eight rats received (in three i.p. injections at zero, six, and 24 hours) a total of 16 ml of fluid containing: A) NaCl 150 mEq/L (2.4 mEq Na), B) 10 calories as 15.6% fructose in 91 mEq/L NaCl (0.89 mEq Na), C) 10 calories as 12.5% fructose and 3.4% casein hydrolysate containing 88 mg nitrogen, 0.39 mEq Na and 0.21 mEq K. Forty-eight hour arterial blood values were:

	BUN	pH	Na+	K+
A	216±13.8	7.123±.018	143±1.5	8.3±0.4
B	209±8.3	7.140±.028	141±1.8	7.8±0.4
C	214±7.6	7.097±.022	134±2.3	7.7±0.5

By analysis of variance, the only significant difference between groups was the serum Na ($p < 0.01$). There was no gross, cultural, or histological evidence of pyelonephritis in the obstructed kidneys, and no difference in the weight loss in the three groups of Experiment 2 (overall mean change —1.0g±1.1).

It is concluded that urea production rate in this model of acute renal failure in the rat is:

1) diminished by correction of acidosis,

2) unaffected by 50 calories/Kg/48 hr of fructose, and

3) unaffected by 40 calories/Kg/48 hr of fructose plus the equivalent of 2.7 grams (11 calories)/Kg/48 hr of protein.

The latter (3) is taken as presumptive evidence of enhanced protein anabolism and utilization of administered amino acids in group C.

The Influence of Special Educational Techniques and Medical Care on a Group of Diversely Handicapped Children In Breathitt County, Kentucky†

Bruce H. Coyer, Wesley P. Kozinn (University of Cincinnati), Elizabeth Wade, and Brent D. Amey

PUBLIC health statistics have shown that in low income families there is a greater incidence of organic deficiencies and a greater tendency for diseases to go untreated. These deficiencies are thought to have a deleterious effect upon a child's learning ability (Bloom and Hess, 1965).

This study was done to evaluate the influence of a combined program of medical care and special education techniques on the classroom readiness of a random group of diversely handicapped children who live in a culturally deprived and low income area. It was hypothesized that concentrated assistance in this manner would ameliorate these deficiencies and improve the child's classroom performance.

Pre- and post-tests (Stars and Cases, Spaulding, 1968) on control and experimental groups showed no significant difference. A longitudinal measure is planned.

†Supported in part by PHS Training Grant 5-A07-AH 00174-03 from the Division of Health Manpower Educational Services. The PHS is in no way responsible for the contents of this report.

Association Between Serum Catechol Oxidases And Preeclampsia

D. M. Lowdin and David Hager

EPIDEMIOLOGIC studies indicate that greater than one-third of all maternal deaths in North America are attributed to preeclampsia. Investigations have revealed several physiological differences between hypertensive and normotensive pregnant patients; however, the etiology of preeclampsia is still unknown.

Our study is concerned with the in vitro activity of the serum catechol oxidase enzyme system, which is able to catalyze the oxidation of organic compounds containing a catechol ring structure. Since the level of serum catecholase activity possibly has some bearing on the concentrations of active catecholamines in the blood, measurement of enzyme activity may yield important insight into the role of these catechols in hypertension of pregnancy. Our study population came from among hypertensive and normotensive third trimester pregnant patients at the University of Kentucky. A group of nonpregnant patients was used for a control.

Our investigations are interpreted as showing that both groups of pregnant patients have a higher serum catecholase activity than our control group. Serum catecholase activity was found to be significantly higher in the preeclamptic patients than in normotensive pregnant patients. The reasons for this difference is not determined, but several hypotheses are presented.

An Evaluation of Anti-thrombogenic Coatings For an Extracorporeal Organ Chamber

Michael McBee

ALTHOUGH *in-vivo* renal transplantation has enjoyed much success, in many respects it would be advantagous to employ *ex-vivo* perfusions. Extracorporeal perfusion affords a unique position allowing direct access to the kidney and its vascular supply.

This permits evaluation of structure and function and differentiation between rejection and non-viability. This perfusion requires no major surgery, and if necessary, repeated transplantations could be made with ease. When a kidney is found to function satisfactorily, a transfer to the iliac fossa could ensue.

Methods

Using the technique of A. R. Lavender, M.D., the kidney is perfused inside a chamber to which arterial blood is supplied by a cannulated femoral artery. Blood leaves the kidney, enters the sealed chamber surrounding the kidney, and leaves via a venous cannula entering the femoral vein. The ureter is also cannulated.

Anti-thrombogenic surfaces were essential on all material in contact with blood, since thrombi formation would lead to occluded vascular elements causing renal shutdown. Twenty-seven perfusions employed a graphite-benzalkonium-herparin (GHB) coating described by Gott and eleven used a tridodecylmethyl ammonium chloride (TDMAC) coating devised by Grode.

Results

With GBH coated materials:

Average Perfusion Time: 21.5 hours; systemic heparinization was needed for prolonged perfusions.

Complications: 40 per cent of the recipient dogs died of hemorrhage. Sixty per cent of the recipients developed persistant anemias which were not correctable by transfusions. Hematocrit values fell 19 points on the average.

Reason for Termination: thrombi formation on coated materials caused occlusion of vascular elements.

With TDMAC coated materials:

Average Perfusion Time: 23.6 hours with systemic heparinization, 20.1 hours without.

Complications: none. Hemorrhage was never a problem. Hematocrits fell on the average of only two points.

Reason for Termination: clot formed on kidney itself and streamed into a vascular element. No clots were ever found attached to coated surfaces.

Conclusions

TDMAC coatings provided a much more satisfactory anti-thrombogenic surface than GBH, and further investigation into its use in circulatory assist devices is warranted.

Production of Cavitary Lesions in Dogs Utilizing Histoplasma Capsulatum and Papin

Lucian Y. Moreman and George W. Bauer

HISTOPLASMOSIS is a mycosis of the reticulo-endothelial system secondary to infection with the fungus, *Histoplasma capsulatum*. Infection with the mycosis is found in a high percentage of both human and canine population in the Ohio Valley Region. The majority of infections with Histoplasma are inapparent; however, histoplasmosis may progress to a chronic pulmonary process with cavitations similar to tuberculosis.

In humans, residual cavitations are treated by surgical removal and drugs. Personal communication and search of the literature showed that cavitary pulmonary lesions in canine histoplasmosis are not present. Since canine histoplasmosis is a popular research tool, the production of such cavitary lesions would serve

as a model for more detailed clinico-pathological work. A new approach to the problem was suggested by Ernest Chick, M.D., Department of Community Medicine, University of Kentucky Medical Center.

A sample population of 39 dogs was skin tested, and 17 positive reactors were selected for experimentation. The experimental groups were set up and inoculated as follows: Group I—*H. Capsulatum,* papain, and contrast dye; Group II — *H. Capsulatum* and contrast dye; Group III—papain and contrast dye. The inoculation was done as a special procedure using fluoroscopy and direct bronchoscopy and direct bronchoscopic placement of the admixture. Pre-inoculation and follow-up studies were done using chest roentgenology and complement fixation serology.

The animals were sacrificed two weeks post-inoculation, and autopsy was performed, preserving the inoculated lungs in ten per cent formalin. The pulmonary lesions were studied and described by gross and microscopic examination. In addition, special fungal tissue stain was used to identify the fungus microscopically in the tissues.

A total of four cavitary lesions occured in all three groups inoculated. An attempt was made to correlate pathological data with complement fixation studies and x-ray pattern, but no striking relationships could be found. Although the numbers of animals tested were small, the primary question has been answered affirmatively, since cavitary lesions were produced. More specific work in this particular area is needed.

The Natural History of Drug Abuse of Lower East Side Adolescents

Paul L. Schulster

AT Beth Israel Hospital in New York City, I had the opportunity to study drug abuse of lower Manhattan adolescents. I worked under the direction of Marion Chall, M.D., Chief of Teenage Service at Beth Israel, and was sponsored by the New York City Department of Health.

Beth Israel's Teenage Service is a comprehensive care unit for youths 13-19 years of age, established in 1962, and handles a large number of young drug abusers. Using this adolescent population, I attempted to determine drug abuse patterns (particularly heroin abuse), sources of drugs, environmental factors affecting and attitudes towards drug abuse, knowledge of effects, and the adolescents' ideas about their own needs for intervention and treatment.

It seemed to me that a comprehensive interview-questionnaire would be the most rewarding method of experimentation. This type of questionnaire limited the number of respondents to 27 because of the time involved in administering and interpreting it. This type of questioning allowed me to quantitate the answers to the above questions.

All but one of the 27 adolescents interviewed had smoked marijuana at least one time in their lives. Sixty-two per cent of the marijuana users had used marijuana prior to the use of any other drug. Fifty per cent of those interviewed had used heroin. The use of different types of drugs went from a low of 40 per cent using or having tried cocaine, to a high of 96 per cent using or having tried marijuana.

Other information, such as the availability, patterns of use, cost, future plans concerning the use of drugs, and chronological order of the use of drugs, was obtained.

Effects of a Chemically Defined Diet on the Bacterial Flora Of the Lower Bowel of Mice

Tracy D. Wilkins and William R. Long

THE use of liquid chemically defined diets is becoming increasingly popular in medicine. In humans, the consumption of such diets is known to result in dramatic decreases in the bacterial population of the bowel. It has been used as a preoperative diet for bowel surgery.

Still, little is known about the precise consequences that result from the feeding of such a diet to humans. We thought that mice might be a suitable laboratory animal for such studies.

Adult mice were maintained on either a normal solid diet (Purina, 5010C) or a liquid chemically defined diet (General Biochemicals, 116-A) for eight days. Stained frozen sections were made of the ceca and large intestine. Aerobic and anaerobic bacterial culture methods were used to determine the number of bacteria present.

The mice which were fed the solid diet had dense layers of fusiform bacteria coating the mucosa of the entire lower bowel. These organisms were replaced by short gram positive rods in the mice maintained on the liquid diet. Unexpectedly, the total number of bacteria per gram of cecal contents remained unchanged (2 to 5 x 10^{10}/gm.). In addition, the ceca of the mice on the liquid diet contained 100 times as many facultative aerobic bacteria (4 x 10^{9}/gm.) than did the ceca of mice fed the solid diet (2 to 3 x 10^{7}/gm.).

The population of the facultative organisms in the liquid diet mice were almost entirely coliforms. Such a major shift in the flora of the bowel might have severe complications in regard to opportunist invasion.

EDITORIALS

One Answer to the "Doctor Shortage"

IMAGINE yourself, if you can, in a position where you have the responsibility to 1) evaluate all facets of medical care in the U.S., and 2) plan for the future, holding onto valuable parts of the present system, but also incorporating needed change. The mind fairly boggles. Yet this effort, to evaluate and to plan, is even now being made in many places, with varying degrees of success.

Most obvious among the critics and planners, are the members of Congress, responding in their own fashion to what they perceive to be the desires of their constituents. Also planning, with recently increasing effectiveness, is the AMA and many of its active state and local societies (including KMA).

Less publicly known, but vitally important groups, such as the American Association of Medical Colleges, make many decisions affecting the future of American medicine through its educational processes. The American Academy of General Practice, the American College of Surgeons, and the American Society of Internal Medicine are among others actively engaged in both evaluation and planning of various styles of practice.

Not all of these groups agree upon the strengths and weaknesses of our present system (or non-system, if you happen to be a really severe critic); but they all do agree that accurate knowledge of the present situation seems better than no knowledge, that a rational plan for the future seems better than no plan.

To this end, many surveys and projections are being undertaken; and one of the most surveyed and discussed factors is that of "health manpower." To those of a simplistic turn of mind, the answer to many of the problems of medical care today lies in the production of more doctors. I wonder.

What many people think of as a "shortage" of physicians, I feel, is really often a problem in distribution of physicians. While production of more doctors should be encouraged (as is indeed being done), the presence of more doctors will not insure even distribution of care. The uneven distribution of medical care must be recognized as largely a social problem, involving physicians' (and physicians' families') desires for certain life styles.

Money alone has been shown not to be the answer, in spite of our critics' claims. What today's physician wants is a place to practice good medicine, with the intellectual stimulation and peace of mind that are associated with contact with one's peers. Most of us, even in a "rural" state like Kentucky, are right now practicing, in reality, in loose groups, even if (as in my case) the nominal title is "solo practice." Look around you, size up your practice patterns, and see if this isn't true.

With an overwhelming trend toward group practice, specialty training, and federal support for Health Maintenance Organizations, as well as increasing use of paramedical personnel in screening capacities, it seems that we will see in the near future more practice consolidation into mini-medical centers, regionally located throughout the various states. These will help distribute us more evenly, will help us practice a satisfying and satisfactory brand of medicine, and will be welcomed by patient and physician alike, if they are well-planned. They should arise from the present base of private medical practice, though (with the cooperation of knowledgeable community groups). This point is most important, for attempts to impose consumer-dominated "care-groups" on a medical community, as a method of reform, are much less likely to succeed!

WALTER I. HUME, JR., M.D.



Courier-Journal

C. C. Howard, M. D.

1888-1971

CARL Clifford Howard, the son of Doctor and Mrs. Thomas G. Howard, was born in Summer Shade, Kentucky, in 1888. Following in his father's footsteps, he was graduated from the University of Louisville School of Medicine in 1911. After an internship, he began practicing medicine in Glasgow, Kentucky, serving the people in that area and throughout the state for nearly 60 years.

Because of his relentless enthusiasm to serve, his contributions to humanity were many. In 1914, he established a 12-bed private hospital in Glasgow. He brought the first x-ray equipment to that area and administered the first blood transfusion in Barren County. He left his practice for 18 months to serve with the A.E.F. in Europe during World War I. Upon his return, he and the public-spirited citizens of Glasgow built their first Community Hospital in 1929.

Doctor Howard was a great believer in his profession and its various groups; this prompted him to accept leadership as a member, president, councilor, advisor, and chairman of various organizations, commissions, and committees. Among the many offices he held over the years, was the presidency of KMA in 1934.

Through his efforts, six regional T.B. hospitals were established in Kentucky in 1943. In 1946, the Rural Kentucky Medical Scholarship Fund was created. Doctor Howard served as its Chairman for 25 years. Both of these services greatly improved the quality of medical care in rural Kentucky. He established the Howard Clinic in Glasgow in 1947.

Doctor Howard was the recipient of numerous awards throughout his career: the Good Samaritan Plaque by his fellow citizens, Transylvania College Achievement Citation, the Governor's Medallion for Achievement in Public Health, and the Commonwealth's Award for Exemplary Citizenship. In 1962, he received an honorary Doctor of Science degree from the University of Louisville, and also the University of Louisville Award of Merit—the Minerva. He was the first person to receive both of these awards. At the time of his death, June 2, 1971, he was an overseer of the University of Louisville and a member of the Foundation Board of Western Kentucky University.

Carl Howard will long be remembered. His outstanding qualities as a gentleman, a Christian, a physician, and a citizen, along with his great compassion for his fellow men, endeared him to those who were privileged to know him and to serve with him.

ORGANIZATION SECTION

Out-of-State Guest Speakers To Participate On Scientific Program With Kentucky Physicians At KMA Annual Meeting, Sept. 21-23



Doctor Scott



Doctor Hines



Doctor DeBakey



Doctor Batsakis

Participating with Kentucky physicians in scientific presentations and panel discussions during the 1971 KMA Annual Meeting, September 21-23, will be well-known medical authorities from across the nation. The sessions will be held at Louisville's Convention Center.

The scientific program will feature presentations and discussions on such themes as "Cancer Symposium—Aids to Diagnosis." "Hypertension," and "Drug Abuse." An "Ask the Expert" Session is scheduled for Wednesday afternoon, September 22.

William W. Scott, M.D., Baltimore, Md., and Merrill O. Hines, M.D., New Orleans, La., will speak during the opening session on Tuesday, September 21. Michael E. DeBakey, M.D., Houston, Tex., will address the Wednesday morning session on "Patterns of Atherosclerosis and Their Clinical Significance." Speaking during the morning session on Thursday will be John G. Batsakis, M.D., Ann Arbor, Mich.

Doctor Scott, whose general session topic is "Aids to Diagnosis in Cancer," is a guest of the Kentucky Urological Association. He is a Professor of Urology, Johns Hopkins University School of Medicine, and Urologist-in-Charge at Johns Hopkins Hospital. He is Editor of *Investigative Urology*, Associate Editor, *Journal of Urology*, and on the Editorial Board of *Urology Digest*.

A guest of the Ohio Valley Proctologic Society, Doctor Hines will address the Tuesday morning general session on "Diagnosis of Neoplasia of the Colon." He is Professor of Clinical Surgery, Tulane University School of Medicine, and Medical Director, Oshsner Clinic. He is a member of the Health Insurance Benefits Advisory Council and consultant to the Department of Health, Education, and Welfare on the group practice of medicine. Doctor Hines is also a member and former President of the Board of Directors, Greater New Orleans Area Unit, American Cancer Society.

Doctor DeBakey will deliver the Griswold Memorial Lecture. World renowned for his cardiovascular research and surgery and for his association with many medical publications, Doctor DeBakey is President and Distinguished Service Professor of Baylor College of Medicine. He is on the Editorial Boards of several medical publications and is editor of the *Year Book of General Surgery*.

"Endocrine Causes of Hypertension" will be the subject of Doctor Batsakis' Thursday morning talk. He is Professor of Pathology, University of Michigan, the author of many articles and manuals, and is on the Board of Editors of *Laboratory Medicine* and the Ann Arbor Science Publishing Co.

In addition to the scientific program, the Annual Meeting will include the meetings of 16 specialty groups, two sessions of the KMA House of Delegates, the annual convention of the Woman's Auxiliary, an Orientation Program for new members, more than 75 scientific and technical exhibits, University of Louisville Alumni Reunions, the annual KEMPAC Seminar, and a number of miscellaneous meetings to be announced in the Annual Meeting Program Booklet.

1971 Scientific Program Outline Released For Annual Meeting

The following preliminary scientific program for the 1971 KMA Annual Meeting was released by KMA President John C. Quertermous, M.D., Murray. The program will be presented at Convention Center, Louisville.

Each half-day session of the three-day program will feature a 30-minute intermission in order that physicians may visit the scientific and technical exhibits.

TUESDAY, SEPTEMBER 21

Morning Session

Opening Ceremonies

"Status Asthmaticus"—Martin I. Gold, M.D., Baltimore, Md.

"Prenatal Diagnosis of Fetal Defects"—Albert B. Gerbie, M.D., Chicago, Ill.

"Sports Medicine"—Jack C. Hughston, M.D., Columbus, Ga.

Theme: "Cancer Symposium—Aids to Diagnosis"

"Efficacy of Bone Marrow Examination for Diagnosis and Staging of Patients with Lung Cancer"—Oleg S. Selawry, M.D., Washington, D.C.

"New Aids in the Diagnosis of Lung Cancer"—Eugene C. Klatte, M.D., Nashville, Tenn.

"Aids to Diagnosis in Cancer"—William W. Scott, M.D., Baltimore, Md.

"Diagnosis of Neoplasia of the Colon"—Merrill O. Hines, M.D., New Orleans, La.

Afternoon Session

Eight of the 16 participating specialty groups will meet at 2:00 p.m. There will be no general scientific session at that time.

WEDNESDAY, SEPTEMBER 22

Morning Session

"Peptic Esophagitis"—Lloyd M. Nyhus, M.D., Chicago, Ill.

"Current Problems in Infectious Diseases"—Edward W. Hook, M.D., Charlottesville, Va.

"Pitfalls in Dermatological Therapy"—Sture A. M. Johnson, M.D., Madison, Wis.

"Defects of Plasma Cell Development"—Max Cooper, M.D., Birmingham, Ala.

"Patterns of Atherosclerosis and Their Clinical Significance—Michael E. DeBakey, M.D., Houston, Tex. (Griswold Memorial Lecture)

Afternoon Session

"New Approaches to Surgery for Duodenal Ulcer"—Lloyd M. Nyhus, M.D., Chicago, Ill.

Scientific Exhibits Award Presentation

"Salmonella Infections"—Edward W. Hook, M.D., Charlottesville, Va.

"Ask the Expert" Session

THURSDAY, SEPTEMBER 23

Morning Session

THEME: "Hypertension"

"Mechanisms of Action of Antihypertensive Drugs"—Walter M. Kirkendall, M.D., Iowa City, Iowa

"Endocrine Causes of Hypertension"—John G. Batsakis, M.D., Ann Arbor, Mich.

"Renovascular Hypertension—Diagnosis and Treatment"—John H. Foster, M.D., Nashville, Tenn.

"Health Sciences Center"—Harold E. Boyer, D.D.S., Louisville

"Pesticides and Human Poisoning"—Gordon W. Richmond, M.D., San Francisco, Calif.

THEME: "Drug Abuse"

"Newer Treatment Approaches for Drug Addiction"—Harold T. Conrad, M.D., Lexington

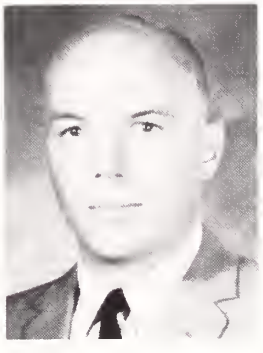
Topic To Be Announced—Edward Gordon, M.D., White Plains, N.Y.

Afternoon Session

The remaining eight specialty groups will meet at 2:00 p.m. No general session is scheduled for the afternoon.

U.S. Astronaut-Physician Will Be President's Luncheon Speaker

Story Musgrave, M.D., U.S. astronaut, will be the featured speaker for the President's Luncheon, to be held September 22, in the Flag Room of the Kentucky Hotel, according to John C. Quertermous, M.D., Murray, KMA President. Doctor Musgrave will speak on "United States' Spaceflight Objectives, 1971-2000."



Doctor Musgrave

Selected as a scientist-astronaut by NASA in August, 1967, Doctor Musgrave has since completed the initial academic and flight training and is currently involved in further training for future manned space flights.

A graduate of Syracuse University in 1958, Doctor Musgrave received a Master of Business Administration degree in Operations Analysis and Computer Programming from the University of California in 1959, a Bachelor of Arts degree in Chemistry from Marietta College in 1960, a Doctorate in Medicine from Columbia University in 1964, and a Master of Science in Biophysics from the University of Kentucky in 1966.

Doctor Musgrave served a surgical internship from 1964 to 1965 at the University of Kentucky Medical Center. He remained there until the summer of 1967 as a U. S. Air Force post-doctoral fellow in Aerospace Physiology and Medicine and as a National Heart Institute post-doctoral fellow.

He is presently a part-time resident in general surgery at the Denver General Hospital and a part-time instructor in the Department of Physiology and Biophysics at the University of Kentucky Medical Center.

Ford And Emberton Are Invited To Address KEMPAC Seminar

Lieutenant Governor Wendell H. Ford, Kentucky's Democratic gubernatorial candidate, and Thomas D. Emberton, Republican gubernatorial candidate, have been invited to speak at the Ninth Annual Political Seminar which precedes the KMA Annual Meeting.

C. Kenneth Peters, M.D., Louisville, Chairman of the KEMPAC Board of Directors, has announced that a reception, followed by a dinner and the Seminar, will begin at 6:00 p.m. EDT, Monday, September 20, at the Executive Inn in Louisville.

The precedent was established, in 1963, of inviting the two major gubernatorial candidates to address the Seminar. Doctor Peters has stated that it is not the purpose of the meeting for the two candidates to debate, but rather to give the physicians and the lay public that attend the opportunity to see and hear the candidates.

The KEMPAC Board of Directors urges all physicians and their wives to make plans to attend the Seminar. Further details will be announced in the August *Journal*.

AMA Asks Medical Societies To Help Curb VD

The American Medical Association is making venereal disease a national theme for Community Health Week-1971, with suggested dates of October 17-23. Informational and promotional material will be available for medical societies.

The American Medical Association Council on Environmental and Public Health reports that gonorrhea ranks first and syphilis third among the reportable communicable diseases in the United States.

For the year ending June 30, 1970, infectious syphilis rates were eight per cent higher nationally than a year earlier, with annual increases spread over 33 states. There is an estimated incidence between 70-80,000 reported cases; 250,000 cases of all forms of syphilis are estimated to be diagnosed and treated each year.

At the same time, gonorrhea morbidity exceeded 573,000 reported cases. Gonorrhea is pandemic in the United States, according to the Council, with an estimated two million cases.

The Council urges medical societies to acquaint their membership with the growing and alarming dimensions of the VD problem. Physicians are urged to take all appropriate measures to reverse the rise in venereal disease and bring it under control.

Physicians in private practice treat approximately 80 per cent of the syphilis and gonorrhea that comes to diagnosis, but report to public health departments only one out of every eight cases of syphilis and one out of every nine cases of gonorrhea they treat. Physicians should assist public health departments by reporting the VD cases they treat, according to the Council.

Medical societies are urged to cooperate and give broad support to public health authorities. Much effort must still be made by health departments and medical societies to foster mutual trust, so that public and private medicine can work effectively for the control of both syphilis and gonorrhea.

Medical societies are asked to support education of patients and the public through more extensive and imaginative use of all available media and through school curricula.

Scholarship Fund Meets, Awards Loans To 17

The Silver Anniversary meeting of the Rural Kentucky Medical Scholarship Fund was held May 20. The Board of Trustees approved 36 loans amounting to $80,000 to medical students for the coming school year. Seventeen loans were granted to first loan applicants.

The Board of Trustees of the Fund designated the applicants for 1971 as the "C.C. Howard, M.D., Silver Anniversary Class," in honor of the retiring Chairman of the Fund.

Gaithel L. Simpson, M.D., Greenville, Vice-Chairman of the Fund since 1954, was elected to succeed Doctor Howard as Chairman. Russell Hall, M.D., Prestonsburg, was chosen Vice-Chairman and William P. McElwain, M.D., Frankfort, Commissioner of Health, Treasurer.

Four new members were elected to the Board of Trustees. They are: Mr. Pierce Lively, Danville, Attorney; Mr. John Koon, Louisville, Executive Secretary, Kentucky Farm Bureau; Mr. Hayden Timmons, Frankfort, Director of Public Relations, Kentucky Rural Electric Cooperative Corporation; and Elmer G. Prewitt, M.D., Corbin, Past-President of the Kentucky Academy of General Practice and a practicing physician.

Doctor Simpson, in commenting on the outcome of this year's meeting, stated, "We are pleased to see a record group of students become part of the Rural Kentucky Medical Scholarship Fund Program. All of us who have had the pleasure of working in this program feel this is an auspicious way to close out 25 years of service, and we look forward to helping provide more and better physician care to all citizens of this Commonwealth."

Advisory Positions Listed

Edward N. Maxwell, M.D., Louisville, Chairman of the KMA Coordinating Commission on Governmental Medical Services, has announced that a directory of all Federal advisory posts requiring physician members has been published by the AMA and sent to all state medical associations with the request that nominations be received for any or all positions as soon as possible. The names of all nominees submitted will be placed in a master file and reviewed when positions become available.

Any Kentucky physician who is interested in being nominated for any of the positions listed, can see the directory or inquire for information at: Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Six Ky. Physicians Granted ACP Fellowships

Six Kentucky physicians have been granted Fellowship in the American College of Physicians. The College dedicates itself to upgrading medical care, teaching, and research, through stringent standards of membership and programs of continuing education.

Hugh R. Butt, M.D., President of the College, said the new Fellows have earned this distinction through certification by their specialty boards, presentation of published material, evidence of scientific accomplishments, and academic or hospital affiliations.

The Kentucky doctors granted the distinction are: Bill M. Domm, M.D., Fort Thomas; Robert G. Luke, M.D., Robert W. B. Penman, M.D., and William H. Waugh, M.D., Lexington; and William C. Gaventa, M.D., and Theodore N. Lynch, M.D., Louisville.

Medical Assistants Elect Officers

James R. Pleasant, Jr., CMA, Madisonville, was installed as President of the Kentucky Society, American Association of Medical Assistants, at the May 14-16 meeting of the group. Mrs. Sarah Hall, Elizabethtown, was chosen President-Elect.

Other officers elected are: Mrs. Viola Rich, Madisonville, Vice-President; Mrs. Carolyn Kelly, Louisville, Treasurer; Mrs. Margaret Perry, Louisville, Recording Secretary; Miss Dorothy Downs, Louisville, Parliamentarian; Mrs. Faye Arnold, Madisonville, Corresponding Secretary. Miss Erlene Russell, Lexington, was chosen Convention Chairman for 1972.

ACS To Meet in Atlantic City

The 57th Annual Clinical Congress of the American College of Surgeons will be held in Atlantic City, October 18-22. Included on the program are 17 postgraduate courses, more than 250 research-in-progress reports, 46 panel discussions and symposia in general surgery and the surgical specialties, and operative telecasts from the Jefferson Medical College Hospital in Philadelphia.

For more information on the Congress and for official registration forms, contact: Mr. T. E. McGinnis, American College of Surgeons, 55 East Erie Street, Chicago, Illinois 60611.

Dr. Duhring Elected By ACOG

John L. Duhring, M.D., Lexington, has been elected Vice-Chairman of the Kentucky section of the American College of Obstetricians and Gynecologists. He will take office during the Annual meeting of District V of the College in Louisville, this October.

Doctor Duhring is Associate Professor of Obstetrics and Gynecology at the University of Kentucky Medical Center.

KMA Committee Reports

Coordinating Commission on Governmental Medical Services

Edward N. Maxwell, M.D., Louisville, Chairman

KMA Headquarters Office **June 3, 1971**

The Coordinating Commission on Governmental Medical Services met on June 3, 1971. The primary purpose of the meeting was to exchange information concerning activities of various committees which are related to Federal and State Government projects.

The commission is composed of the Chairmen of the KMA Committee on Appalachian and OEO Programs, KMA Claims and Utilization Review Committee, KMA Committee on Medical Education, KMA Technical Advisory Committee on Physician Services (Title XIX), and the KMA Advisory Committee on Title XVIII, and was formed for the express purpose of coordinating the activities of these committees.

Committee on Legislative Activities

Hoyt D. Gardner, M.D., Louisville, Chairman for National Affairs

Fred C. Rainey, M.D., Elizabethtown, Chairman for State Affairs

KMA Headquarters Office **June 8, 1971**

The KMA Committee on Legislative Activities met on June 8, 1971. Three new members have been added to the committee so that there will be representation from the two medical schools and the State Board of Health. Representing the Board of Health is its Chairman, Dexter Meyer, Jr., M.D.; the University of Kentucky College of Medicine representative is Peter P. Bosomworth, M.D., Vice-President; and the University of Louisville School of Medicine representative is Douglas M. Haynes, M.D., Dean.

Plans are being developed toward preliminary legislative goals for the 1972 Kentucky General Assembly. There was also considerable discussion in regard to current national medical legislation.

Plans are being made to select legislative key men for the State Legislators who were elected in May and will have no opposition in November.

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NEWS ITEMS

James R. Biggs, Jr., M.D., is now associated with the Department of Radiology of the Somerset City Hospital. Doctor Biggs graduated from the University of Kentucky College of Medicine, interned at the Baptist Memorial Hospital, Memphis, and served his residency at the University of Kentucky Medical Center. He was previously in practice in Columbus, Ga.

Thomas A. Dale, II, Grayson, a junior at the University of Kentucky College of Medicine, was recently selected as a semi-finalist in the Medical Student Division of the SAMA-Squibb Scientific Exhibit Program. As a result, he was invited to display his exhibit at the Student American Medical Association's National Student Research Forum held in Galveston, Texas, and was awarded $500 and a gold medal. The exhibit was entitled, "Esophageal Varices: Diagnosis and Management."

William E. Layden, M.D., has joined the faculty of the University of Louisville School of Medicine. An ophthalmologist, Doctor Layden graduated from the University of Vermont College of Medicine, interned at the Hartford Hospital, and served his residency at the University of Louisville School of Medicine.

Phillip G. Padgett, M.D., is now in family practice at the Daniel Boone Clinic in Middlesboro. After graduating from the University of Louisville School of Medicine, Doctor Padgett interned at St. Joseph's Infirmary in Louisville.

Hiram C. Polk, Jr., M.D., has been named Chairman of Surgery at the University of Louisville School of Medicine. Appointed recently by the Board of Trustees of the University, Doctor Polk will start work at U. of L. on August 1. He is presently Associate Professor of Surgery at the University of Miami School of Medicine. A graduate of the Harvard Medical School, he served his internship and residency at Barnes Hospital in St. Louis.

John C. Tapp, M.D., is now in family practice in Bowling Green. He graduated from the University of Louisville School of Medicine and interned at Louisville General Hospital.

CORRECTION

Charles F. Blankenship, M.D., M.P.H., the author of one of the 1971 Medical Education Conference papers published in the June *Journal*, was incorrectly identified as being on the faculty of the University of Kentucky College of Medicine. Doctor Blankenship is currently Professor and Acting Chairman, Department of Comprehensive Medicine, University of Louisville School of Medicine.

KAGP Is To Hold Program On Drugs, July 21-22

The Kentucky Academy of General Practice has scheduled a program entitled "Practical Problems in the Use of Drugs in Family Practice" for July 21-22 at Lake Barkley, near Cadiz.

The two-day program will feature sessions on antibiotics, psychotropic drugs, cardiac drugs, and special problems in drug therapy, according to Thornton E. Bryan, Jr., M.D., Cadiz, Program Coordinator.

KAGP is planning the program in conjunction with the Division of Continuing Education of Vanderbilt University School of Medicine, the Tennessee Mid-South Regional Medical Program, and several drug companies. It is acceptable by the American Academy of General Practice for 12½ prescribed hours of continuing education.

Advance registration is requested. For further information contact: Thornton E. Bryan, Jr., M.D., Cadiz Clinic, Cadiz, Kentucky 42211.

Otolaryngology Course Offered

The Department of Otolaryngology of the University of Miami School of Medicine will present a "Postgraduate Course in Otolaryngology for the Family Physician" on October 8-9. The course will be presented at the Sheraton Four Ambassadors Hotel in Miami. For further information write: F. W. Pullen, II, M.D., Neuro-Otologic Laboratory, School of Medicine, P.O. Box 875, Biscayne Annex, Miami, Florida 33152.

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In Memoriam

HIRAM S. EGGERS, M.D.
Louisville
1889-1971

Hiram S. Eggers, M.D., 81, a Louisville family practitioner and anesthesiologist, died May 20. Doctor Eggers graduated from the University of Louisville School of Medicine in 1912. In the 1920s, he was associated with the old Louisville Health Department, where he was instrumental in supervising a massive smallpox vaccination program for Louisville. He was a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

ROBERT H. ENGLISH, M.D.
Henderson
1914-1971

Robert H. English, M.D., 57, a general surgeon and former chief of staff of the Community Methodist Hospital in Henderson, died April 22. Doctor English was a former faculty member at the University of Louisville School of Medicine and instructor in anatomy at Ohio State University and Johns Hopkins University. He graduated from the Ohio State University College of Medicine and received an M.A. degree in public health from the University of Michigan. He held memberships in the American College of Surgeons, the Henderson County Medical Society, the Kentucky and American Medical Associations, and the Southeastern Surgical Conference.

DAVID L. JONES, M.D.
Fulton
1887-1971

David L. Jones, M.D., 83, a family practitioner in Fulton since 1919, died April 16. Doctor Jones began practice in Dukedom, Tennessee, in 1909 after graduating from the University of Tennessee College of Medicine. He served as a medical officer in France during World War I. He was a member of the American Academy of General Practice, the Fulton County Medical Society, and the Kentucky and American Medical Associations.

GEORGE H. RILEY, M.D.
Erlanger
1920-1971

George H. Riley, M.D., 51, a family practitioner in Erlanger, died April 12. Doctor Riley graduated from the University of Louisville School of Medicine in 1944. He was a member of the Campbell-Kenton County Medical Society and the Kentucky and American Medical Associations.

DAVID R. UPTON, M.D.
Munfordville
1926-1971

David R. Upton, M.D., 44, a family practitioner in Munfordville since 1959, died May 13. Doctor Upton was a 1958 graduate of the University of Louisville School of Medicine. He was a member of Hart County Medical Society and the Kentucky and American Medical Associations.

Newborn Symposium Planned

The Department of Pediatrics of the University of Louisville School of Medicine will present its Fifth Annual Newborn Symposium, November 4-5. The subject to be discussed is "Hematological Problems in the Newborn." Participants will be: Richard Behrman, M.D., John M. Bowman, M.D., Louis K. Diamond, M.D. Bill Hathaway, M.D., Alvin Mauer, M.D., Frank Oski, M.D., and the faculty of the Department of Pediatrics.

For further information contact: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, 226 East Chestnut Street, Louisville, Kentucky 40202.

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DEPT. OF RADIATION MEDICINE
LEXINGTON, KENTUCKY 40506
TELEPHONE: 606-233-5108

Opportunities Available to General Practitioners Through KMA Physicians Placement Service

The Physicians Placement Service of the Kentucky Medical Association, in an effort to obtain a better distribution of physicians in our state, is listing below the many practice opportunities available for general practitioners, and would encourage any physician desiring to relocate his practice to contact KMA's Physicians Placement Service for detailed information on any opportunity listed below.

We try to provide a two-way flow of information between interested parties without actually recommending or becoming involved in any negotiations.

This list includes three breakdowns: one indicating communities where local citizens are hoping to encourage a doctor to establish a practice in their area; general practitioners in the rural area in need of replacements; and physicians desiring associates. This last section includes opportunities for partnership, or in group practices, quite often with no investment necessary.

If you are interested in any particular area, please let us know, and we will be happy to provide additional details.

COMMUNITIES SEEKING PHYSICIANS

General Practitioners

County	City	County	City
Breckinridge	Cloverport	Logan	Adairville
Crittenden	Marion	Madison	Berea
Grant	Williamstown	Marshall	Hardin
Harlan	Evarts	McLean	Calhoun
Henderson	Henderson	Owen	Owenton
Knox	Barbourville	Pendleton	Falmouth
Johnson	Paintsville	Webster	Sebree
Larue	Hodgenville		

PHYSICIANS DESIRING REPLACEMENTS

General Practitioners

County	City	County	City
Butler	Morgantown	Menifee	Frenchburg
Fayette	Lexington	Pendleton	Falmouth
Jessamine	Nicholasville	Pike	Pikeville
Johnson	Paintsville	Trigg	Cadiz
Lincoln	Stanford	Taylor	Campbellsville
Mason	Maysville		

PHYSICIANS DESIRING ASSOCIATES

General Practitioners

County	City	County	City
Adair	Columbia	Lawrence	Louisa
Barren	Glasgow	Letcher	Whitesburg
Bell	Middlesboro	Livingston	Salem
Breckinridge	Cloverport	McLean	Calhoun
Christian	Hopkinsville	Madison	Berea
Daviess	Owensboro	Madison	Richmond
Edmonson	Brownsville	Muhlenberg	Greenville
Floyd	McDowell	Muhlenberg	Central City
Graves	Mayfield	Nelson	Bardstown
Hardin	Elizabethtown	Pike	Pikeville
Hardin	West Point	Pulaski	Somerset
Harlan	Evarts	Russell	Jamestown
Henderson	Henderson	Trigg	Cadiz
Hopkins	Madisonville	Whitley	Corbin
Laurel	London		



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Tomato Rice, Old Fashioned

Exchange Substitution for ½ Bread and ½ Fat

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Exchange Substitution for 1 Meat and 1½ Bread

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Split Pea with Ham

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In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the series as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influence of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

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Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

1A5

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Cream (aminacrine hydrochloride 0.2%, sulfanilamide 15.0%, allantoin 2.0%)

Suppositories (aminacrine hydrochloride 0.014 Gm., sulfanilamide 1.05 Gm., allantoin 0.14 Gm.)

Contraindications: Known sensitivity to sulfonomides.
Precautions/Adverse Reactions: The usuol precoutions for topicol ond systemic sulfonomides should be observed becouse of the possibility of obsorption. Burning, increosed locol discomfort, skin rosh, urticorio or other monifestotions of sulfonomide toxicity ore reosons to discontinue treotment.
Dosage: One opplicotorful or one suppository introvoginolly once or twice doily.
Supplied: Creom—Four-ounce tube with or without opplicotor. Suppositories—Box of 12 with opplicotor.

TRADEMARK: AVC AV-104 2/71 Y-149

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The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

Clinical supply available to physicians.

WILLIAM P. POYTHRESS & CO., INC.
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Manufacturers of Ethical Pharmaceuticals

Clinical Extension of a pure Smooth Muscle Relaxant

TROCINATE®

Brand THIPHENAMIL HCl

400 mg./100 mg. S/C tablets

Trocinate relaxes all smooth muscles. Its direct action (musculotropic) does not involve the autonomic nervous system and it is not mydriatic. It is metabolized by the body and eliminated in the urine as harmless degradation products. Trocinate has a remarkable history of freedom from side-effects.

When a pure direct-acting smooth muscle relaxant is indicated, Trocinate is the drug of choice.

DIARRHEA (functional) . . . *the first 400 mg. tablet usually relieves the discomfort of diarrhea so promptly that it ceases to be a bother.*

DIVERTICULITIS—MUCOUS COLITIS . . . *the accompanying discomforts can be relieved by this direct smooth muscle relaxant.*

BLADDER SPASM . . . *relaxation is immediate. One or two tablets condition the bladder for cystoscopy in one hour.*

SPASTIC URETER . . . *the specific relaxing effect of Trocinate on the spastic ureter has been proven by animal studies and affirmed clinically. (J. Urol. 73:487-93)*

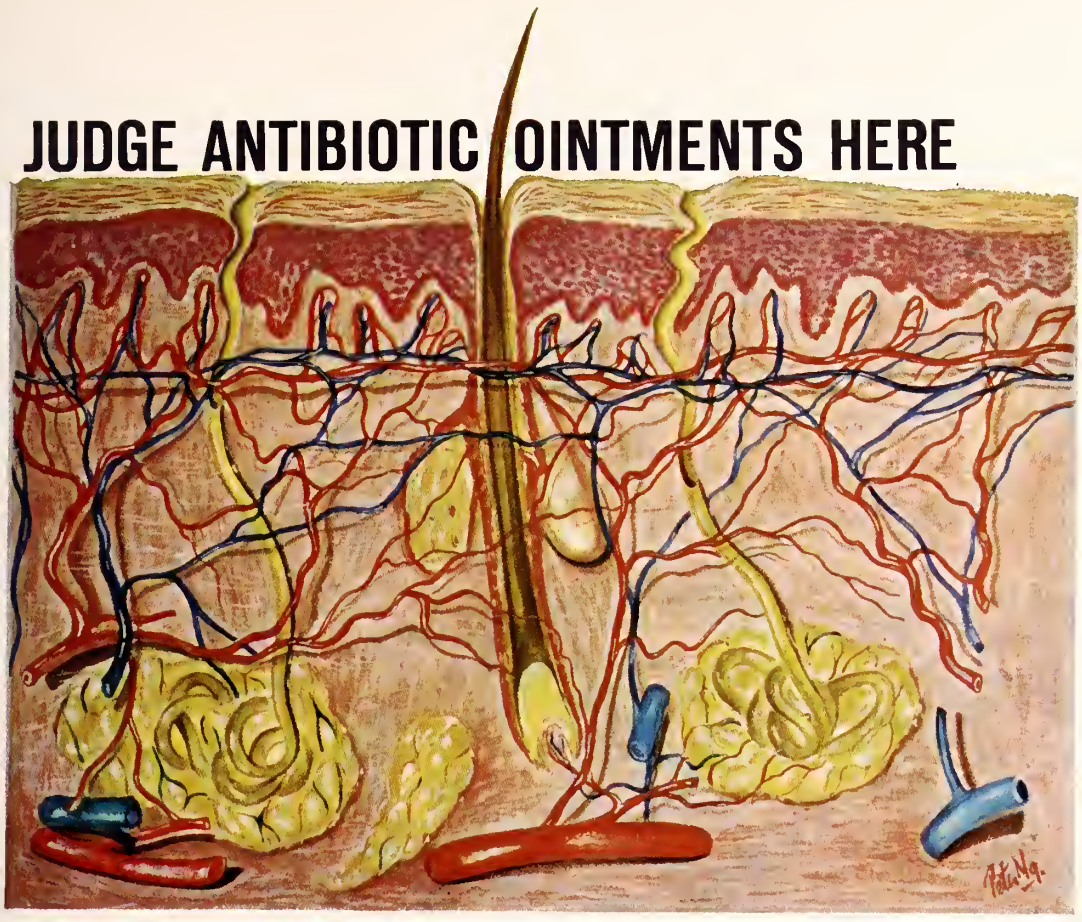
NOTE: *The high therapeutic index of Trocinate permits its administration in dosage sufficient to relieve smooth muscle spasm promptly. 400 mg. dosage usually creates a therapeutic blood level. In reducing dosage after relief, lengthening the time between dosage rather than lessening the recommended dose is preferable. The prompt direct action allows a consciousness of the first suggestion of return of symptom . . . a guide to dose spacing and to determining when treatment is complete. A prescription for twelve or sixteen 400 mg. tablets will usually correct spasm and leave a few tablets for a reserve.*

PRESCRIBING INFORMATION

WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

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Manufacturers of Ethical Pharmaceuticals

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Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

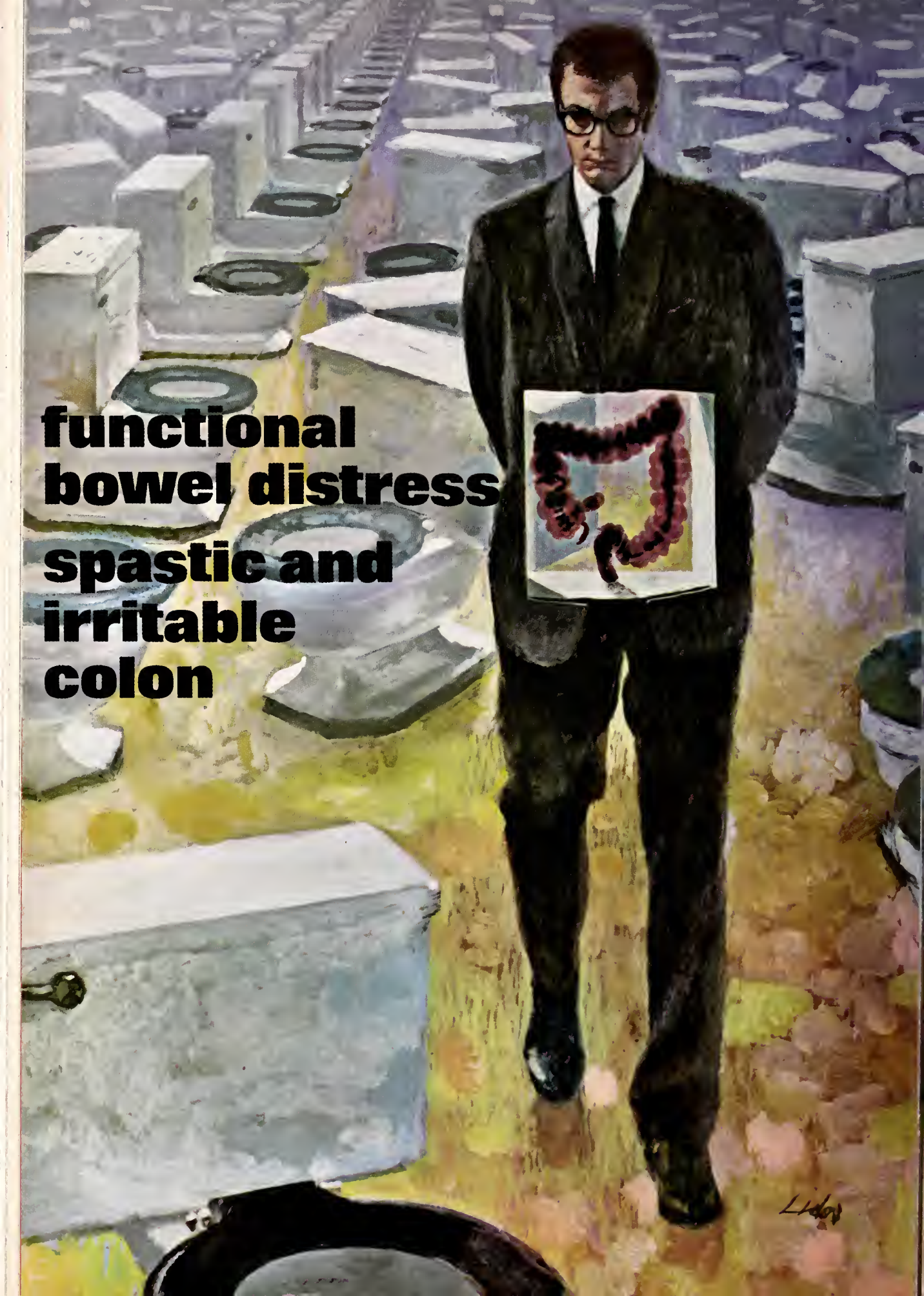
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functional
bowel distress
spastic and
irritable
colon

move up to "the Robinul response"

when lower G-I symptoms demand a potent synthetic antispasmodic

In treating hypermotility associated with functional lower G-I disorders are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent antispasmodic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of hypermotility, making it a highly effective agent in functional bowel distress, as well as in spastic and irritable colon. Robinul Forte also exerts a more selective action on the gastrointestinal tract. If the patient has a "one tract mind" concerning his lower G-I symptoms, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2 mg. Forte (glycopyrrolate)

■ **INDICATIONS** Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue tablets engraved AHR/2 in bottles of 100 and 500.

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A·H·ROBINS



The all-day, all-ight summer cold and allergy pill.

Novahistine LP can give your patients the convenience of twice-a-day dosage—morning and bedtime—along with prompt relief from the symptoms of allergic rhinitis, hay fever or summer colds. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. Even when nasal congestion is the result of repeated allergic episodes, patients can usually enjoy around-the-clock relief. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

DOW THE DOW CHEMICAL COMPANY, Rx Pharmaceuticals, Indianapolis

Novahistine® LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

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A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm....and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
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For complete information, consult Official Package Circular

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *Enterobacter aerogenes*, *K. pneumoniae*, *Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.
Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective alternative therapy is available.
Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary – in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.
Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.
Dosage and Administration: The maximum total daily dose should not exceed 15 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours.

If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.
Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available – Pediatric Injection 75 mg. in 2 ml.

A.H.F.S. Category 8:12.28

BRISTOL
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Division of Bristol-Myers Company
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Call it what you will, it may be premalignant.

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
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and Efudex® (fluorouracil) 5% cream can resolve it.

Call it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,[3,4] offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these mutliple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.[5] Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.[6]

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.[5] The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.[6]

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin. A Clinicopathological Treatise*, ed. 2, New York, Grune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T. and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Klein, E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



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(fluorouracil)
cream/solution

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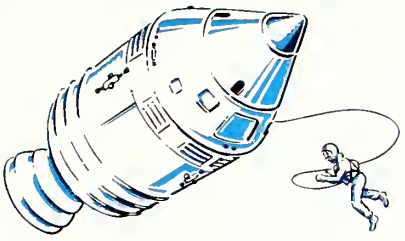


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Mon in space, now foit accompli, re-emphasizes the importance of Uro-Phosphote theropy. Research into the effect of spoce travel on the ostronaut reveols that weightlessness causes loss of bone colcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution a prophylaxis to prevent kidney or blodder colculi.

Uro-Phosphate®

NOW A SUGAR-COATED TABLET

Eoch tablet contoins: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

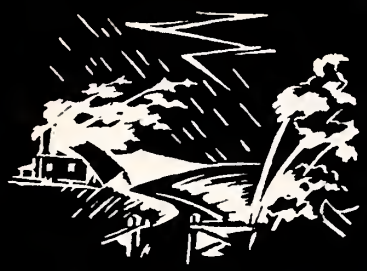
For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 toblets on retiring will keep residuol urine acid and sterile, contributing to comfort and rest.

A clinicol supply will be sent to physicians ond hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals





Hurricane Camille dumped up to 31 inches of rain on Virginia's Blue Ridge Mountains the night of August 19-20, 1969. She had already devastated the Gulf Coast from Louisiana to Florida, halted her northward journey over Kentucky and Tennessee, then headed eastward over West Virginia and Virginia.

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Emotional stress can be just as destructive to the individual as turbulent, ravaging flood waters are to land and property. Solfoton will contribute to the maintenance of a mental climate for purposeful living.

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SEDATION WITHOUT DEPRESSION

EACH TABLET OR CAPSULE CONTAINS:

Phenobarbital.....16 mg.
(Warning: may be habit-forming)

Bensulfoid (See PDR).....65 mg.

Precaution: same as 16 mg. phenobarbital

DOSAGE: One tablet or capsule every 6 hours will sustain mild sedation.

Available in three forms to satisfy prescribing circumstances:

TABLETS	100s	500s	5000s
CAPSULES	100s	500s	1000s
TABLETS S/C	100s	500s	4000s

Federal law prohibits dispensing without prescription

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Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

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Controindicotions: Concurrently with MAO Inhibitors, in patients hypersensitive to this drug; in emotionally unstable potients susceptible to drug abuse.

Warning: Although generolly safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnoncy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuotion of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relotively low incidence. As is charocteristic of sympathomimetic agents, it may occasionolly couse *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression hos been reported. In o few epileptics an increase in convulsive episodes hos been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycordio, precordiol poin, arrhythmio, polpitotion, and increased blood pressure. One published report described T-wove changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isoloted experience, which has not been reported by others. *Allergic phenomena* reported include such conditions os rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipotion, nousea, vamiting, and abdominol discomfort hove been reported. Specific reports on the hematopoietic system include two eoch of bone marrow depression, agranulocytasis, and leukopenia. A variety of miscellaneous odverse reactions hove been reported by physicions. These include complaints such as dry mauth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libida, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 o.m.); TEPANIL: One 25 mg. tablet three times daily, one haur before meals. If desired, on additional tablet moy be given in midevening to avercame night hunger. Use in children under 12 years of oge is nat recammended.

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Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastraintestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps

Q103

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the quality of survival

With the steady improvement in the therapy of cancer, and consequent increase in the number of 5-year survivals, our programs reflect increasing concern with the future of the cancer patient—with the *quality* of his survival.

High priority is being given to the rehabilitation of cancer patients—those having had mastectomies, colostomies, laryngectomies, amputations, and other drastic treatments for cancer.

Our "Reach to Recovery" program is a dramatic example. This program helps the physician meet many special needs of the postmastectomy patient on the road to total recovery. Patients receive psychological reassurance and practical help from women who have had the same surgery.

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Our rehabilitation programs not only give heart and help to patients but provide the physician with vital aids necessary to improve the *quality* of survival.

American Cancer Society



When irritable colon feels like this



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- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

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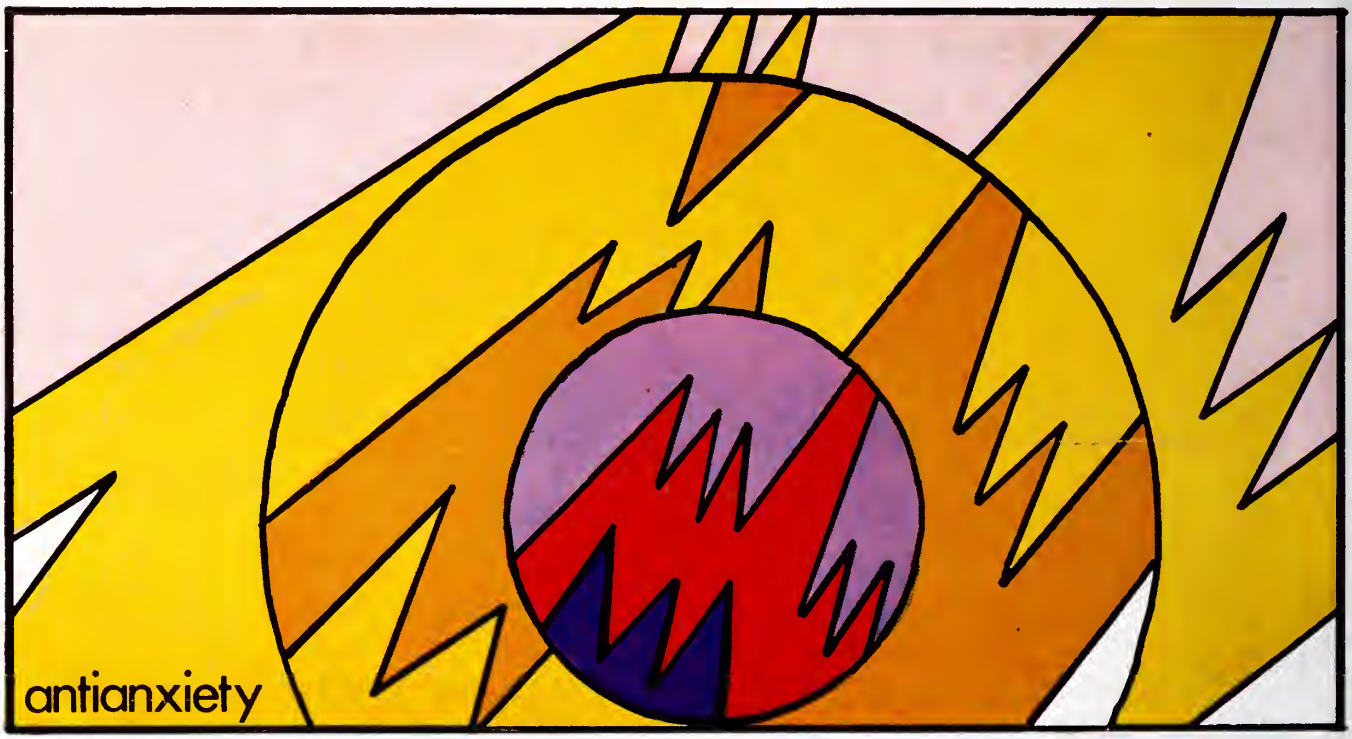
antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

anxiety: a time bomb

Unless "defused," anxiety may build up to an intensity that can overwhelm the patient's inner defenses. Also, in one weakened by chronic illness or surgery, excessive anxiety may provoke or aggravate symptoms and interfere with recovery.

The antianxiety action of Librium (chlordiazepoxide HCl)—used adjunctively or alone—has demonstrated clinical usefulness in many fields of medical practice where anxiety complicates the patient's condition.



Librium®
(chlordiazepoxide HCl) 5-mg, 10-mg, 25-mg capsules up to 100 mg daily for severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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The Journal of The KENTUCKY Medical Association

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Annual Meeting Issue



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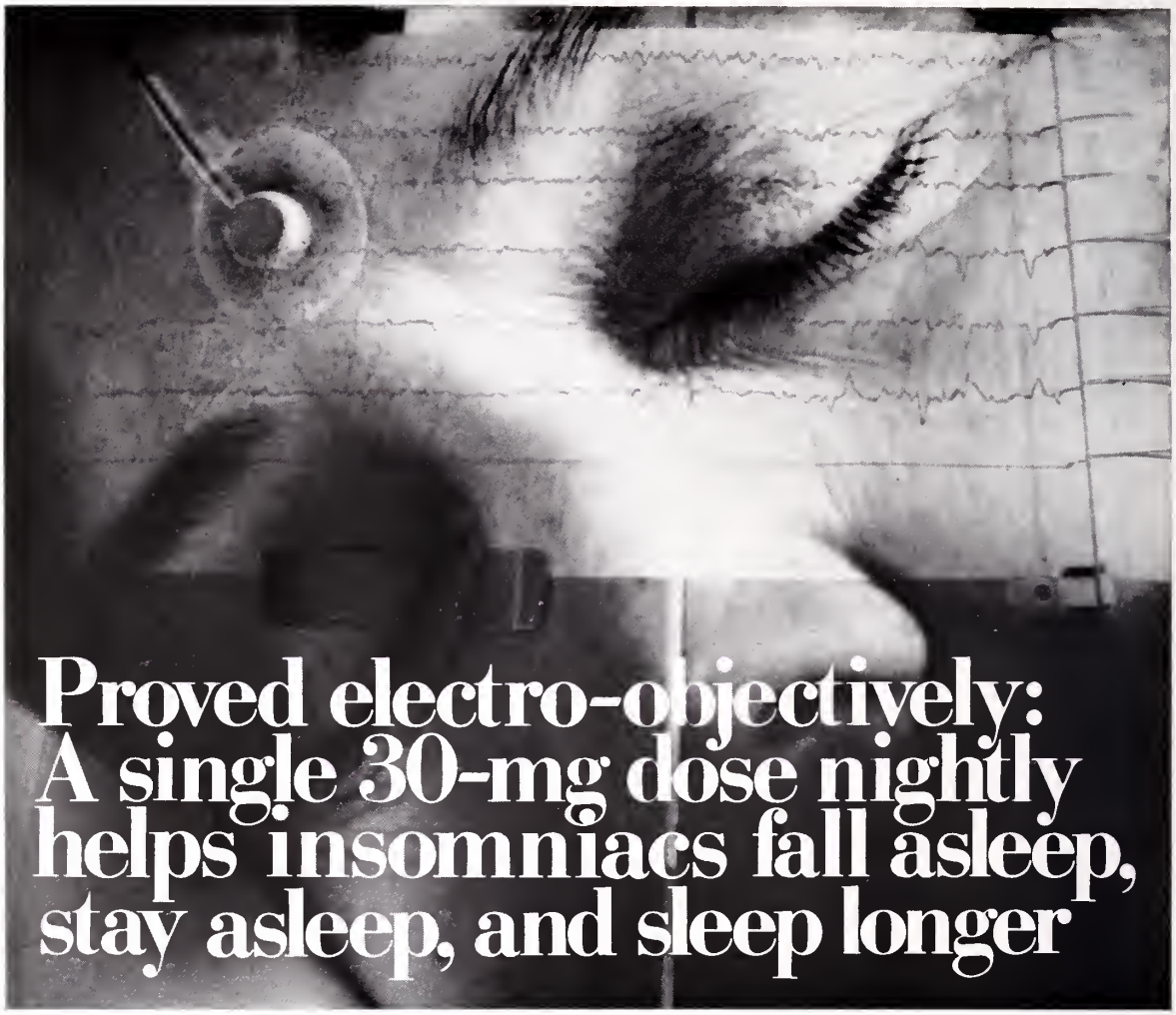
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Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

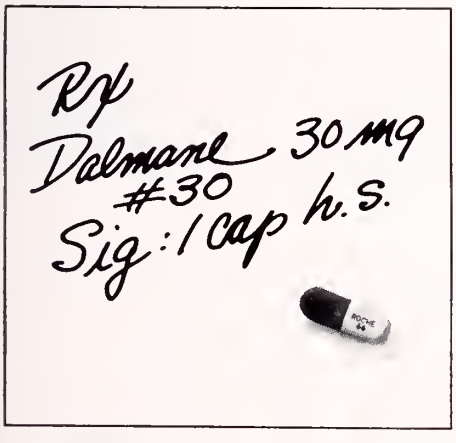
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.:* "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.:* "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

New **Dalmane®**
(flurazepam hydrochloride)

Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity, have also been reported in rare instances.

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Just one suppository usually assures a predictable bowel movement in 15 minutes to an hour. Gone are the tubing, the "accidents", and the bruised egos associated with enemas.

For preoperative preparation, the combination of tablets at night and a suppository the next morning usually cleans the bowel thoroughly. Suppositories may also be particularly helpful when straining should be avoided as in postoperative care.

As with any laxative, abdominal cramps are occasionally noted. The drug is contraindicated in the acute surgical abdomen.

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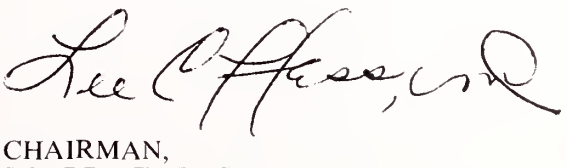
WE HAVE reached the time of year when we must plan for the Annual Meeting of KMA for 1971. As we reflect on this past year and make ready the agenda for the House of Delegates, I cannot help but feel a sense of pride in the accomplishments of the committees and Board of Trustees. You have every right to share in this pride of accomplishment.

To mention only a couple, KMA has taken great strides in peer review and has placed Kentucky physicians in the forefront of organized medicine nationally.

We are about to embark upon a Kentucky State Foundation for Medical Care. This most important item will be presented to the House of Delegates this fall. I most sincerely urge each of you to make sure you will be well represented for this presentation and the many other very important items on the House agenda. It is only through this type of active participation that our organization can flourish, grow, and stay in the forefront of medical leadership.

In addition to these two major items, you will be interested to know that many new and exciting programs have begun in your organization, and it will only be through you and your delegation's participation that you will be able to express pride of accomplishment in the future—that future which we will turn over to our children so that they, too, may flourish in this great free country.

Participate and help mold that future! Stay home and you can only stand on the sidelines and watch. Many feel that our organization is doing very little, but I can assure you that these individuals who are "sideliners" do not know what great work has been done by our many active committees and do not share in the pride of accomplishment that participation can give you. Your organization is a viable, growing body; and I feel confident it will continue to be so for many years to come.



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This is the fifth in a series of articles written at the request of KMA President John C. Quertermous, M.D.

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From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

AUGUST

23 PANMED television series, "The Anemic Patient," KET 10:30 p.m. EST (9:30 p.m. CST)

30 PANMED television series, "Advances in the Treatment of Malignant Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

SEPTEMBER

6 PANMED television series, "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," KET 10:30 p.m. EST (9:30 p.m. CST)

13 PANMED television series, "The Transient Ischemic Attack," KET 10:30 p.m. EST (9:30 p.m. CST)

16-17 Postgraduate course, "Abnormal EKG in the Absence of Heart Disease," American College of Cardiology, University of Kentucky College of Medicine, and Indiana University School of Medicine, University of Kentucky Medical Center, Lexington

21-23 Annual Meeting, Kentucky Medical Association, Seelbach Hotel and Convention Center, Louisville

OCTOBER

8-9 Kentucky and Tennessee Regional Meeting of the American College of Physicians and the Kentucky and Tennessee Societies of Internal Medicine, Louisville Stouffer's Inn

NOVEMBER

4-5 Fifth Annual Newborn Symposium, "Hematological Problems in the Newborn," Department of Pediatrics, University of Louisville. For further information write: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, 226 East Chestnut Street, Louisville, Kentucky 40202

IN SURROUNDING STATES

AUGUST

24-26 Postgraduate course, "The Ideal Practice: Current Trends in How to Achieve It," University of Tennessee Division of Continuing Education and Memphis Regional Medical Program, held at Wassell Randolph Student Center, Memphis, Tenn.

29-30 Thirty-first Annual AMA Congress on Occupational Health, Jackson Lake Lodge, Grand Teton National Park, Wyoming

OCTOBER

4-9 Postgraduate course, "Laryngology and Bronchoesophagology," Department of Otolaryngology, University of Illinois Medical Center, held at University of Illinois Hospital Eye and Ear Infirmary, Chicago, Ill.

8-9 Postgraduate course, "Otolaryngology for the Family Physician," Department of Otolaryngology, University of Miami School of Medicine, Miami, Florida

16-21 Fortieth Annual Meeting, American Academy of Pediatrics, Chicago, Ill.

18-22 Fifty-seventh Annual Clinical Congress, American College of Surgeons, Atlantic City

24-28 Third Annual Fall Scientific Assembly (37th Annual Meeting), American College of Chest Physicians, Philadelphia, Pa.

NOVEMBER

1 Twenty-eighth Annual Meeting, Southern Chapter of the American College of Chest Physicians, in cooperation with the Southern Medical Association, Fontainebleau Hotel, Miami Beach

12-17 Southern Medical Convention, Miami, Florida

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their summer and fall meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.



THE INSURANCE PAGE



Hospital Claims Audit

ON A recent visit to the hospital records room, the writer encountered a Blue Cross claims auditor who was studiously examining hospital charts which were placed before him on the work table. The auditor was engaged in conversation and proved to be a very pleasant fellow who was glad to explain his work to me.

He stated that once each month he selects a number of charts covered by routine Blue Cross policies and a number of Medicare charts—since Blue Cross is the fiscal intermediary for hospital claims for Medicare in Kentucky. These charts are reviewed to see that laboratory and other charges are in accordance with Blue Cross agreement with the hospital.

The doctor's orders are carefully scrutinized to see that the items billed to Blue Cross were actually ordered by the doctor, and that x-rays and laboratory reports which were billed are actually in the chart as billed.

He reported that occasionally he finds an incidence of overcharging by the hospital, but more often he finds incidences of undercharging or failure to bill for laboratory procedures ordered by the doctor and actually reported on the chart.

He also stated that in the case of Medicare patients he reads the certification and if he decides the certification does not fully warrant continued hospital stay, he obtains a photostat of the history, physical examination, and progress notes in the chart, so that they may be reviewed by Blue Cross reviewing physicians. He further commented that there are numerous incidences where the reviewing doctor disallows a claim that later proves to be justifiable simply on the grounds that the claim is not documented in the history, physical examination, and progress notes.

All practicing physicians would like to have the time to write extensive histories and physicals, and we all intend to write volumes of progress notes. With the increasing demands on the physicians time, due to the increased number of patient visits and the increased hospital patient load, we find that time and time again we have not lived up to our own expectations.

The busy physician needs to learn how to document the necessity of hospitalization, continued stay, reason for requesting extensive x-rays and laboratory procedures and consultation, in as few words as possible. When this is done, we need not worry about the auditor scrutinizing our charts or the claims review doctor reading our history and progress notes.

LEWIS DICKINSON, M.D.



MEDICAL SCHOOLS



Department of Obstetrics and Gynecology
University of Kentucky College of Medicine

Staff:

John W. Greene, Jr., M.D., Professor & Chairman (University of Pennsylvania)	233-5345
John W. Roddick, Jr., M.D., Professor (Northwestern University)	233-5493
Preston V. Dilts, Jr., M.D., Associate Professor (Northwestern University)	233-5410
John L. Duhring, M.D., Associate Professor (University of Pennsylvania)	233-5123
David S. Swan, M.D., Assistant Professor (Wayne State University)	233-5173
John R. van Nagell, Jr., M.D., Assistant Professor (University of Pennsylvania)	233-5345
Beverly A. Smith, M.D., Instructor (University of Tennessee)	233-5277

The Department of Obstetrics and Gynecology has major interests in the high risk pregnancy, gynecologic oncology, and conception control in diseases of women, both medical and surgical. Doctors John W. Roddick, Jr., David S. Swan, and John R. van Nagell, Jr., have major interests in gynecologic diseases and, particularly, gynecologic oncology.

Doctors John W. Greene, Jr., Preston V. Dilts, Jr., and John L. Duhring have interests in the high risk pregnancy, problems of conception control, and the physiology of pregnancy. Doctor Beverly A. Smith is also interested in gynecologic problems, both medical and surgical, as well as abnormal and normal obstetrics.

The Department is staffed by the above-mentioned seven full-time people, 13 residents, and six voluntary faculty members.

The Department has 21 gynecologic beds and 26 obstetric beds. Clinics are operated every day of the week, except Saturday and Sunday. Clinic appointments can be made by calling 233-6201. Patients can be seen in the regular clinic or referred to any of the seven full-time faculty members by making appointments at 233-6201.

For those persons desiring consultation in high risk obstetrical problems, it is advised that they contact either Doctors Greene, Duhring, Dilts, or Smith, directly. For those with problems of gynecologic cancer, it is advised that they contact Doctors Roddick, Swan, or van Nagell, directly.

Active research is being carried on in areas of gynecologic oncology, the physiology and pathology of reproduction, and clinical problems.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 13-67. This 24 year old married, white, gr 7, para 3, was under the care of a private physician. Her prenatal course was uncomplicated, with the exception of cystitis due to urethral stricture treated by a urologist and cured. Her LMP was 7-27-66, EDD 5-3-67. She had some painless vaginal bleeding April 8, 1967. The diagnosis was low implantation of the placenta. This was confirmed by Doptone and Isotope scan. She had no additional bleeding.

She was admitted to the hospital in active labor at 5:25 a.m. on June 24, having contractions every two minutes. Blood pressure on admission was 110/70. No FHT were heard. She was given 75 mg Demerol, 1/100 gr Scopolamine, Largon 20 mg IV @ 5:25 a.m. Vaginal examination revealed the cervix thick and fairly firm, 4 cm dilated.

At 6:00 a.m., the nurses noted the uterus didn't seem to completely relax between contractions that were occurring every two minutes and lasting 30-40 seconds. Her physician was notified.

At 7:00 a.m., the cervix was 5-6 cm dilated, the presenting part remained high. She seemed more comfortable at 7:30 a.m.

At 8:15 a.m., she had very rapid respiration. Her nail beds and lips were cyanotic. Neither pulse nor BP was obtainable.

She was moved to the delivery room; 1000 cc 5% glucose water with 1 cc Vasoxyl was started, IV, at 8:20 a.m., plus oxygen mask. Her BP at 8:30 a.m. was 104/72, P 92. An Ob/Gyn consultant checked the patient vaginally. Her cervix was long. She had no external bleeding, and the presenting part wasn't engaged. A Foley catheter was inserted and she was transferred to surgery for an emergency section.

She was severely cyanotic on arrival in the operating room. She had no BP or pulse; 500 cc of blood was started, 0.5 cc of adrenalin was given, IV. Oxygen and cyclopropane anesthesia started at 9:05 a.m.

Her chest was opened by a general surgeon and internal cardiac massage was begun. An emergency section was performed at the same time by the Ob/Gyn consultant, with the delivery of a seven pound, nine ounce stillborn girl at 9:15 a.m.

It was noted at the time of the removal of the placenta that there was approximately a 25 per cent portion that had been previously separated. There was a very small amount of free blood in the endometrial cavity. It was not thought that the separation or the amount of blood was enough to produce the acute shock.

The patient was pronounced dead at 9:20 a.m. The clinical impression was maternal shock due to pulmonary embolism. No autopsy was obtained.

Comments

The Committee classified this death as a direct obstetrical one; however, great difficulty in formulating possible reasons for her death was encountered. Again, it is emphasized how important an autopsy is in such a case.

The Committee felt that this death could possibly be one from amniotic fluid embolism, although the status of the membranes is not given. Certainly the character of her labor, that is, a term size baby with tetanic uterine contractions in a high vertex, can predispose to amniotic fluid embolism. It has been stated that the prime candidate is the grand multipara with a large baby, ruptured membranes, a tumultuous labor with an unengaged vertex.

The Committee discussed the fact that the death could possibly have been prevented at the time of her admission when the diagnosis of low implantation of the placenta was made. Had the cesarean section been performed earlier with this diagnosis, the death might not have occurred, although the diagnosis of placenta praevia was not confirmed at the cesarean section. Therefore, it is difficult to implicate the necessity for earlier delivery, so that this death is classified as probably not preventable, with the knowledge at hand.

The anesthesia could have been better managed, in that more vigorous attempts at resuscitation might have been fruitful. It is also noted that adrenalin is contraindicated with cyclopropane anesthesia, for the possibilities of ventricular fibrillation are great with this combinaton.

Therefore, with the knowledge at hand, we have difficulty in implicating preventable factors in this maternal death, and are left with the clinical impression, as stated in the case, that either an amniotic fluid embolism or some similar catastrophe caused her demise.

Because bacterial proliferation in the urine is a function of time and retention,[1,2,3] *dawn can be...*

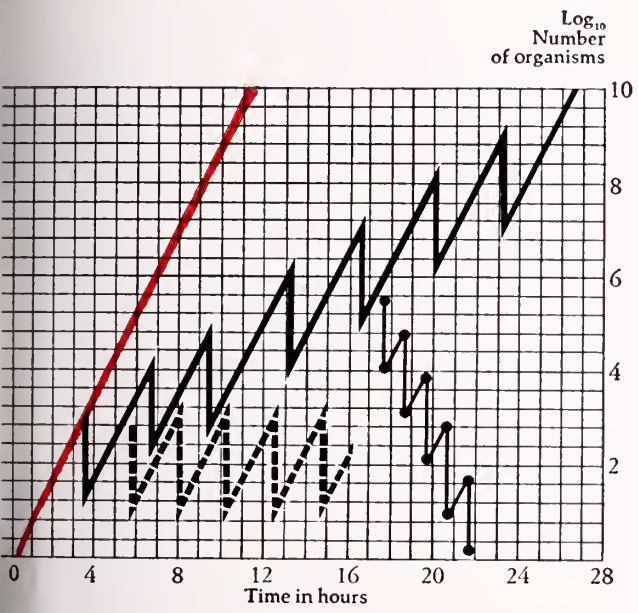
the darkest hour.



Voiding frequency and bacterial build-up[1]

Graph shows the theoretical effect of various voiding frequencies on bacterial proliferation in the urine.

- maximum growth rate during the overnight period
- voiding every 3½ hours
- voiding every 2½ hours
- voiding every hour: the "washout" effect



For through-the-night coverage

Force fluids. Frequent micturition. It's hard to fault this regimen for dealing effectively with an acute bladder infection. Another fundamental adjunct to treatment is drug therapy for round-the-clock antibacterial coverage. Coverage that may be especially desirable during the night hours of sleep when urinary retention favors bacterial build-up in the bladder. This is the coverage that Gantanol (sulfamethoxazole) *b.i.d.* can provide.

Controls susceptible gram-negative and gram-positive bacteria

Within 2 to 3 hours of the initial 2-Gm adult dose, effective antibacterial levels in blood and urine begin working to control the most common urinary tract invaders. Subsequent 1-Gm *b.i.d.* doses maintain coverage your patient needs to fight *E. coli* and other susceptible gram-negative and gram-positive pathogens.

Your options: tablets or suspension

Prescribe Gantanol Tablets or the pleasant-tasting Suspension. Either dosage form provides your patient with the all-day, all-night coverage she needs to fight off nonobstructed cystitis.

References: 1. O'Grady, F., and Cattell, W. R.: *Brit. J. Urol., 38*:156, 1966. **2.** Hinman, F., Jr., and Cox, C. E.: *J. Urol., 96*:491, 1966. **3.** Lapides, J., *et al.*: *J. Urol., 100*:552, 1968.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

In nonobstructed urinary tract infections

Gantanol® B.I.D. (sulfamethoxazole)

12 hours of therapy with every dose

ROCHE

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Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Don't forget

KENTUCKY MEDICAL ASSOCIATION
ORGANIZED 1851

1971 KMA Annual Meeting

September 21-23

Seelbach Hotel and Convention Center

Brief Summary of Prescribing Information– 9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

BRISTOL
BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

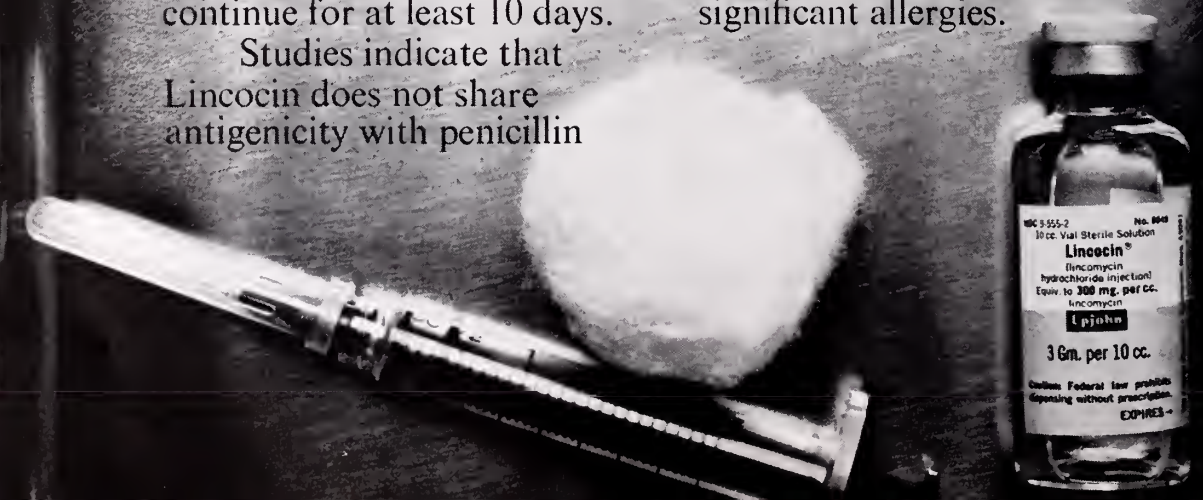


Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



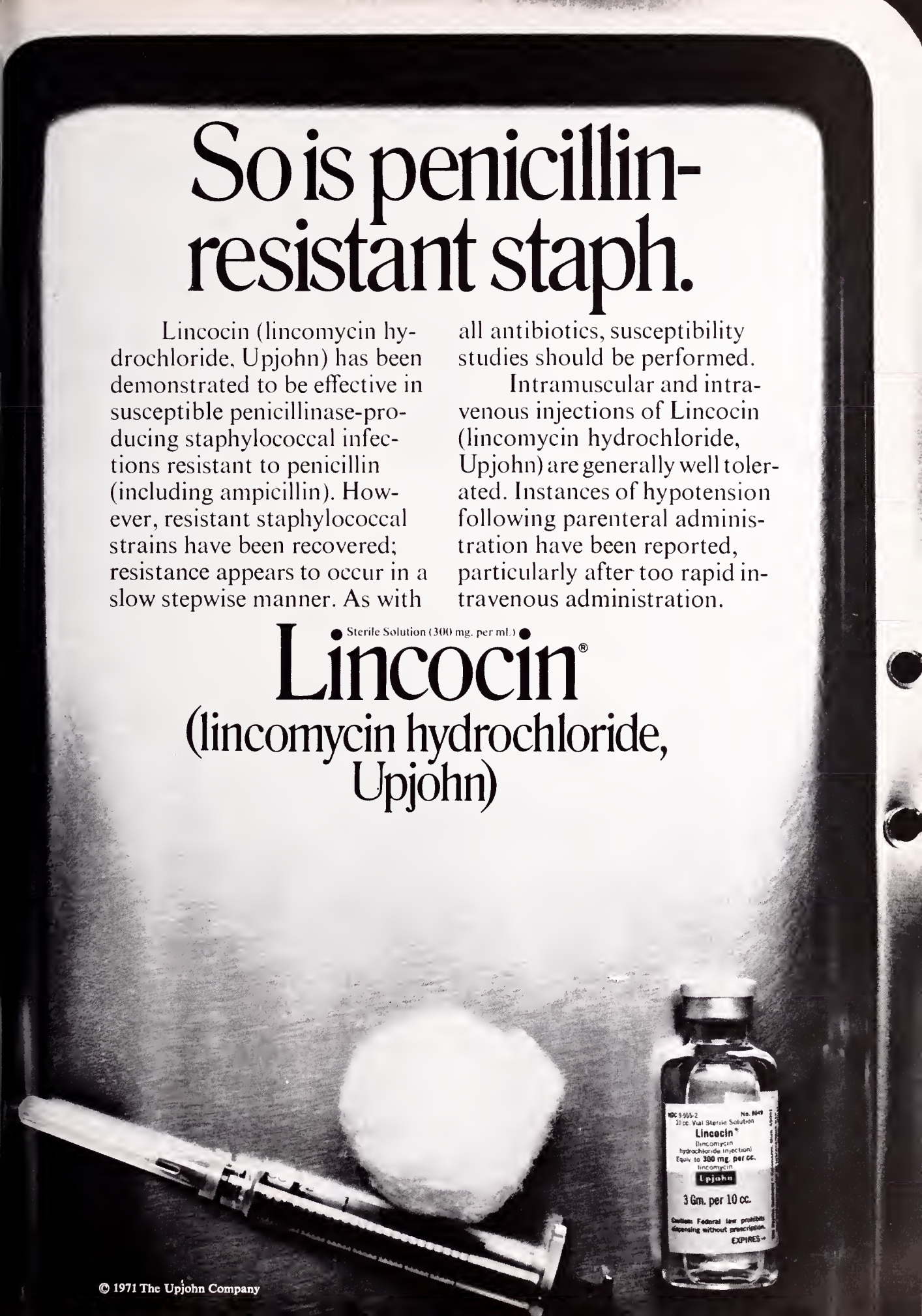
So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)



© 1971 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn





of the tetracycline-nystatin products

...none is lower priced

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965

373-1

For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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A DIVISION OF KOSTER-SWOPE, INC.

3712 FRANKFORT AVENUE

Louisville—St. Matthews

897-1641 895-2451

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

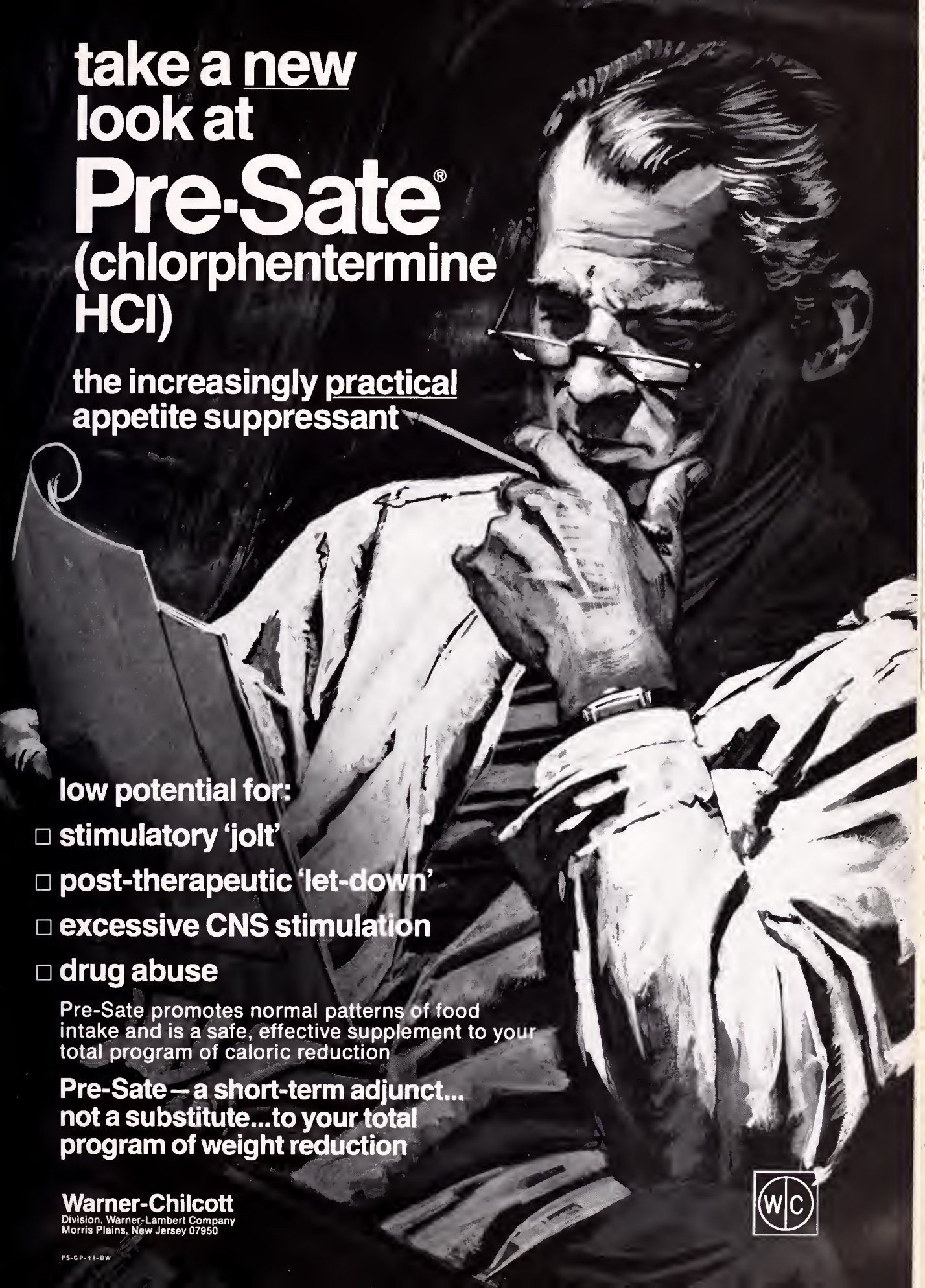
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

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Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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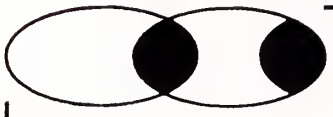
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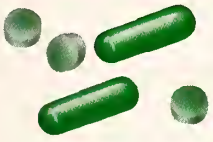
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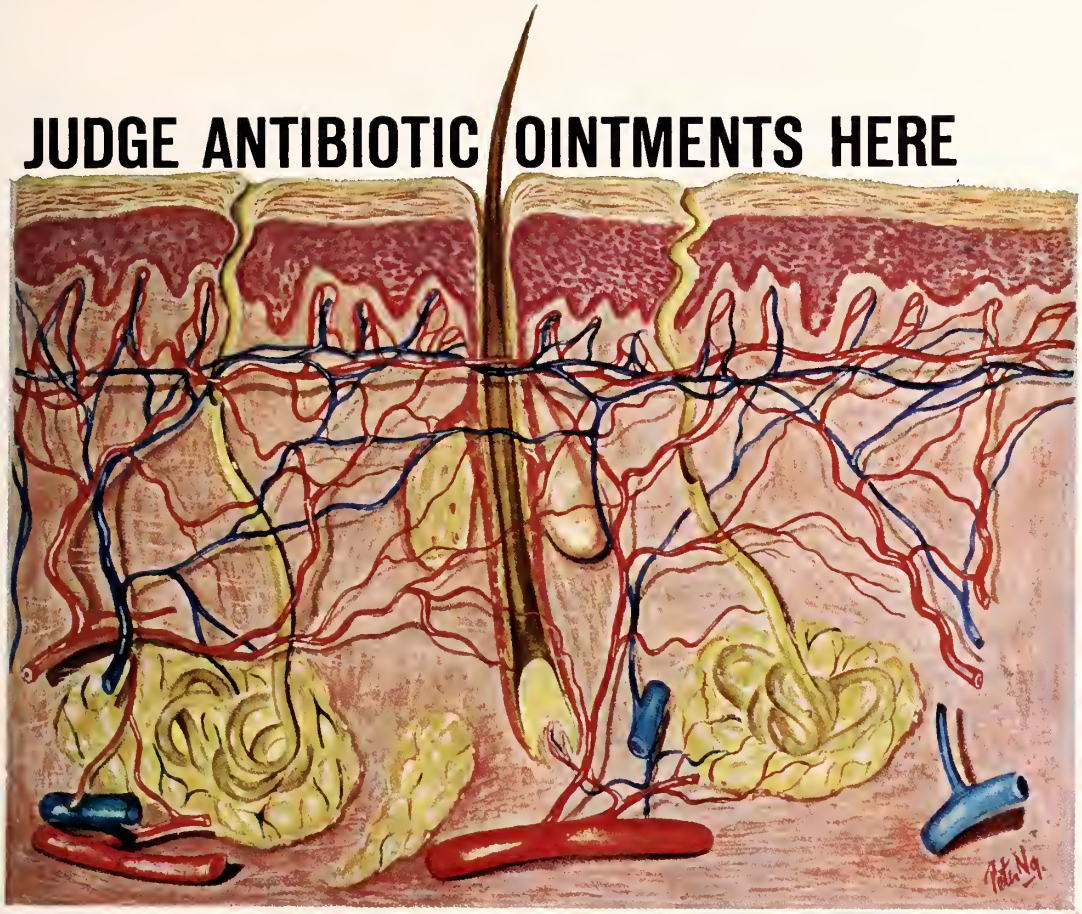
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WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

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VOLUME 69 AUGUST 1971 No. 8

Peripheral Arterial Embolism†

GILES L. STEPHENS, M.D.,* EDWARD L. SCOFIELD, M.D.,** AND V. N. MATHUR, M.D.**

The clinical profile of peripheral arterial embolism is presented. Seventeen cases treated by embolectomy at the St. Joseph Infirmary are discussed. The expedient treatment of these patients is stressed.

THE purpose of this paper is to present our most recent experience with embolectomy for peripheral arterial embolism and to stress the use of the Fogarty embolectomy catheter in performance of embolectomy under local anesthesia in these poor risk surgical patients.

Clinical Material

Seventeen cases of peripheral arterial embolism treated by embolectomy at the St. Joseph Infirmary during the years 1964 through 1968 were studied. The median age was 66.4 years. There were 13 Caucasians and four Negroes. There were 11 males and six females. Fifteen patients had a chief complaint of pain. Six of the 17 patients had a preoperative arteriogram. All of these were femoral arteriograms.

The average interval between onset of embolism andembolectomy in 15 cases was 12.9 hours, with four patients having their embolectomy within three hours, one patient at 40 hours, and another patient at 48 hours. The site of lodgement of the embolus was the femoral artery in 14 cases, the brachial artery in one, the axillary in one, and the popliteal artery in one.

The primary admission diagnosis in 11 patients was arterial embolism; in six it was acute myocardial infarction. Associated diseases in these patients were as follows: atrial fibrillation was found in seven; 12 had arteriosclerotic heart disease; two had diabetes; seven had hypertensive cardiovascular disease; one had pulmonary emphysema; three had rheumatic heart disease; and one had had a prior cerebrovascular accident. The source of the embolus was thought to be the left atrium in eight, a mural thrombus in five, a thrombus on the mitral valve in one, and unknown in three.

Preoperative Heparin was employed in nine patients. The operation performed was an embolectomy without the Fogarty catheter in 11 patients and arterial embolectomy with the Fogarty catheter in six patients. Local anesthesia was employed for the embolectomy in nine patients, general anesthesia in one patient, axillary block in one patient, and spinal anesthesia in six patients.

The results of arterial embolectomy as judged by the operating surgeon were as follows: good in 14, fair in none, and poor in three. Fourteen limbs were salvaged; two limbs were lost; and one limb was probably destined

†*Presented at the meeting of the Kentucky Chapter, American College of Surgeons, held May 17, 1969, in Somerset, Kentucky*

**Former Director of Surgical Training, St. Joseph Infirmary, Louisville, Kentucky*

***Surgical resident, St. Joseph Infirmary, Louisville, Kentucky*

to loss when the patient died on the second postoperative day following mycardial infarction. Two above the knee amputations were required for the limbs that were lost.

Postoperative complications were as follows: death in two patients, wound hematoma in one patient, gangrene of skin and muscles of the anterior compartment of the leg in one patient, wound infection in two patients, pulmonary edema in one patient, and thrombosis of the femoral artery at the arteriotomy site in two patients.

All 17 patients received postoperative anticoagulant therapy of a variable length of time. The mortality was 12 per cent. One patient died on the 14th postoperative day, probably secondary to a myocardial infarction; and the other patient died on the second postoperative day, possibly due to myocardial infarction.

Discussion

Robert Linton states that the pattern of arterial embolism has changed.[1] Patients today are generally older, and the majority have arteriosclerotic heart disease as the cause of their peripheral arterial embolism. It is his conviction that the relative incidence of atrial fibrillation has remained remarkably constant at about 72 per cent during the last 27 year period. In 1948, atrial fibrillation was found to be due to rheumatic heart disease in nearly 64 per cent of the patients. However, in the last ten years this has changed, so that at the present time arteriosclerotic heart disease has become the most common cause of atrial fibrillation.

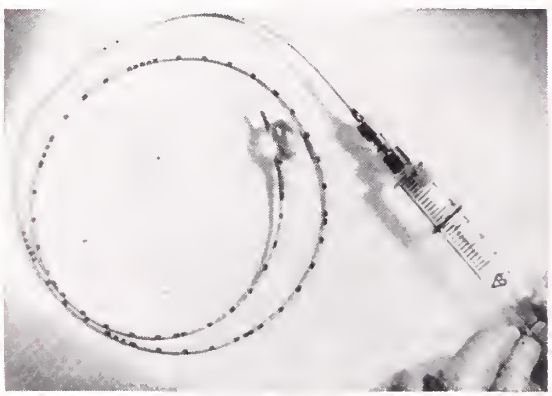


FIGURE 1 Fogarty embolectomy catheter with attached syringe with the balloon inflated.*
* From Cranley, John J., Krause, Raymond J., Strasser, Edward S., Hafner, Charles D., and Fogarty, Thomas J.: Peripheral Arterial Embolism: Changing Concepts. Surgery 55:57-63, 1964.

Haimovici states that the fibrillating left atrium has been the source of almost half of the total number of emboli.[3] Next in frequency is myocardial infarction with mural thrombus, which in his experience accounted for one-third of the cases. de Takats states that an electrocardiogram should be taken on these patients preoperatively, because a silent myocardial infarction may first present with the symptoms of peripheral arterial embolism.[5]

According to J. D. Hardy, the bifurcation of the femoral artery is in all large series the most common site of arrest of arterial emboli.[4] He stresses that one should realize that if gangrene of the leg is permitted to occur, the resulting operation for amputation of the extremity would be more traumatic to the patient than would prompt exploration of the femoral artery under local anesthesia.

Spencer and Eiseman[7] performed eight successful embolectomies in patients whose arterial embolism occurred from eight hours to 21 days prior to embolectomy. They stated that viability can be predicted by the palpable consistency of the extremity. If the muscles were soft to palpation then the tissues were viable.

Shumaker and Jacobson[6] have emphasized the fallacy of the sense of marked optimism



FIGURE 2 Femeral arteriogram demonstrating an embolus in the proximal popliteal artery showing the meniscus sign of embolic occlusion.

which appears to exist among physicians concerning the prognosis in cases of arterial embolism to the upper extremities. In their series of patients not treated by embolectomy, amputation was required in four of these six patients.

T. J. Fogarty[2] lists the following advantages of his balloon catheter techniques for arterial embolectomy:

1. Increasing the ease, safety, and completeness with which one may extract the embolus and propagated thrombus through a single arteriotomy.

2. Recognition of the fact that distal propagation of clot does not always occur in direct continuity with the embolus. Failure to remove this clot has undoubtedly been a cause of operative failure or of incomplete restoration of arterial circulation.

3. Insuring safe retrograde extraction of aortic and iliac emboli, even from atherosclerotic vessels.

4. Decreasing the hazards of heparinization in the immediate postoperative period because of limited dissection and avoidance of multiple arteriotomies.

5. Allowing the use of local anesthesia in critical cases.

Linton states that further improvement in morbidity and mortality will depend not only on prompt aggressive treatment of the initial arterial embolus and basic heart disease, but also on a more aggressive approach to prevention of recurrent embolism.



FIGURE 3 Fogarty embolectomy catheter extracting embolus from the superficial femoral artery. The arrow points to the catheter.

The clinical profile of peripheral arterial embolism is presented. Seventeen cases treated by embolectomy at the St. Joseph Infirmary are discussed. The expedient treatment of these patients is stressed.

References

1. Darling, R. C., Austen, W. G., and Linton, R. R.: Arterial Embolism. *Surg. Gyn. Obst.* 124:106, 1967.
2. Fogarty, T. J., Cranley, J. J., Krause, R. J., Strasses, E. S., and Hafner, C. C.: A Method for Extraction of Arterial Emboli and Thrombi. *Surg. Gyn. Obst.* 116:241, 1963.
3. Haimovici, H.: Peripheral Arterial Embolism — A study of 330 unselected cases of embolism of the extremities. *Angiology* 1:20, 1950.
4. Hardy, J. D.: Surgery of the Aorta and its Branches. First Edition, Philadelphia, J. B. Lippincott Co., 1960.
5. Lary, B. G., and de Takats, G.: Peripheral Arterial Embolism after Myocardial Infarction. *JAMA* 155:10, 1954.
6. Shumaker, H. B., and Jacobson, H. S.: Arterial Embolism. *Ann Surg.* 145:145, 1957.
7. Spencer, F. C., and Eiseman, B.: Delayed Arterial Embolectomy — A New Concept. *Surg.* 55:64, 1964.

Serendipity and the Parathyroid Glands

Ronald D. Hamilton, M.D.*

Lexington, Kentucky

With the recent development of multiphasic screening procedures, there has been a significant increase in serum calcium abnormalities. Since these patients oftentimes are asymptomatic, a working differential diagnosis along with some generalized aspects of calcium metabolism are presented.

IN THIS era, the diagnosis of parathyroid disease is most often made by luck. By this I mean that serum calcium abnormalities turn up, often quite unexpectedly, during the course of screening procedures. Formerly we prided ourselves in doing a careful history and physical examination and then ordered only the "pertinent" laboratory procedures. We missed a lot of parathyroid disease as a result.

Parathyroid disease is rare and its manifestations vague and confusing. Often marked serum calcium abnormalities will not be reflected in clinical symptoms or physical findings. In a 1961 review of 380 cases of proven primary hyperparathyroidism, Keating[1] listed 45 as being found by chance alone. This figure has been considerably higher in our own limited experience; and because of this, all new patients are routinely screened with the Technicon SMA 12, which includes serum calcium and phosphorus determinations.

It is of interest that in a recent survey[2] conducted in upstate New York, approximately 70 per cent of internists and general practitioners responding indicated that the determination of serum calcium was not a usual or desired practice. Should this figure hold true for other geographical areas, it would significantly lower the possibility of detecting asymptomatic, and perhaps some symptomatic, calcium abnormalities.

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Embryology and Anatomy, Parathyroid Glands

The parathyroid glands develop in the embryo from the third and fourth pharyngeal pouches. During the separation from these endodermal pouches, there may be slight fragmentation, or small separations, which account for the occasional accessory or ectopic parathyroid glands.

In adult life, the parathyroids, usually four in number, are situated on the posterior aspect of the thyroid gland. Their combined weight is approximately 120 mg. They derive their blood supply from the inferior and superior thyroid arteries. The cervical sympathetic ganglia provide nerve fibers.

These glands are quite distinct, have their own capsules, and show entirely different microscopic structure when compared with the adjacent thyroid gland. Since they are entirely separate, they constitute in themselves an individual endocrine gland producing parathyroid hormone (parathormone).

Because of the recent discovery of calcitonin[3] (thyrocalcitonin), mention is made regarding the last pharyngeal pouch, which in the human is incorporated into the thyroid gland, and to a lesser extent, the parathyroid and thymus glands. In several lower forms of life, this pouch eventually develops into the ultimobranchial body; whereas, in the human, it is generally regarded as being responsible for the formation of the parafollicular cells (C cells or light cells) of the thyroid gland. These cells are thought to be the source of the hypocalcemic hormone calcitonin (thyrocalcitonin).

Some Aspects of Calcium Metabolism

The average adult body contains 1000 to 1200 grams of calcium. Almost 99 per cent of this is located in the mineral crystals of the bone. Only one per cent is contained in the

extracellular fluids. The concentration of calcium in the plasma is maintained relatively constant by a complex system of controls involving the intestines, kidneys, bone, skin, and, during lactation, the mammary glands. The above system is primarily controlled by three agents: parathyroid hormone, vitamin D, and calcitonin. Needless to say, numerous other hormones influence calcium metabolism both directly and indirectly. Among these hormones are: growth hormone, gonadal hormone, adrenoglucocorticoids, thyroxine, and pancreatic hormones.[4]

In the plasma, calcium exists in three forms: ionized, complexed to organic anions, and protein bound. Normally the total concentration is 2.45 milliequivalents per liter or approximately 10 mg. per 100 ml. About 46 per cent is protein bound and 54 per cent ultra-filterable, with 1.18 millimols per liter existing as the ionized form and the remainder complexed to anions. Even though the ionized fraction seems to be the important biological variable, it is more convenient for the average laboratory to determine the total plasma calcium level.[4]

Parathyroid Hormone

Collip[5] extracted the first active preparation of parathyroid hormone in 1925. In 1959, Aurbach[6] prepared the hormone in stable and partially purified form. More recently bovine, porcine, and human parathyroid hormones have been isolated and characterized.

The rate of secretion of parathyroid hormone is controlled by serum calcium levels; if the serum calcium is low, the rate is increased, and if the calcium level is high, the rate is decreased.[7, 8] However, in hyperparathyroidism the levels of parathyroid hormone are high when measured by radioimmunoassays.[9]

Parathyroid hormone elevates the serum calcium level by mobilization of calcium from bone and by promoting absorption of calcium from the gastrointestinal tract (primarily duodeum and upper jejunum).[10] It also decreases the secretion of calcium in the milk and salivary glands.[4] A second effect is a phosphaturic action on the kidneys which is manifested by increasing tubular reabsorption of calcium and decreasing tubular reabsorption of phosphorus.[10]

Recently it has been proposed that parathyroid hormone causes activation of adenyl cyclase in the plasma membrane of renal and skeletal tissue. The cyclic AMP formed is thought to mediate the peripheral actions of the parathyroid hormone.[11]

Calcitonin (Thyrocalcitonin)

In 1962, Munson[3] and coworkers discovered calcitonin. They had observed that if rat parathyroid glands were removed by cautery, the serum calcium levels fell to lower levels than if the parathyroids had been removed by surgical dissection. They, therefore, came to suspect that the cautery was releasing a hypocalcemic factor from the thyroid. This hypothesis was tested and found to be correct. The structure of procine calcitonin has now been established by a number of investigators,[12, 13] and radioimmunoassay techniques[14] and bioassay procedures[15] have been developed. Most of the data at the present time suggest that calcitonin principally acts to inhibit bone resorption and as a potent antagonist to parathyroid hormone in the bone. Secretion of calcitonin is stimulated by hypercalcemia and inhibited by hypocalcemia.

Vitamin D

The D vitamins (vitamin D^2, vitamin D^3, and dihydrotachysterol) are a group of biologically active sterols which have marked effects upon calcium metabolism. Some, or perhaps all, of the needs of humans can be met by the action of sunlight upon the skin converting a provitamin D to vitamin D^3. Vitamin D acts primarily by causing an increased retention of calcium, promoting absorption from the gastrointestinal tract, promotion of growth, and retention of phosphate.[4]

Clinical Disorders of Calcium Metabolism

In discussing the clinical abnormalities of calcium metabolism, it is convenient to divide them into two categories, those conditions causing elevation and those causing depression of the serum calcium level. Before pursuing a differential diagnosis of either, it is first important to document the presence of such an abnormality. Chemical estimation of serum calcium levels must be made with great care and accuracy. Their interpretation must be

based on knowledge of normal values and reproducibility by a particular laboratory. If the results are borderline and the cause of the abnormality is not obvious, several determinations are recommended over a period of days to weeks.

As in many other disease states, the medical history may be of some benefit, although more than often the ultimate diagnosis is made in the laboratory. Symptoms of hypercalcemia are often quite vague and retrospective, but include: malaise, polyuria, polydipsia, bone pain, psychological manifestations, gastrointestinal complaints, recurrent renal calculi and coma, among other things. Historically, one should inquire about the usage of calcium containing medications, vitamin D, thiazide diuretics, or excessive milk and alkali ingestion, which may in themselves cause hypercalcemia.

Once hypercalcemia seems established, a working differential diagnosis must be formulated. These are numerous conditions which can lead to this abnormality, and at least the ones listed in Table I should probably be included in a differential diagnosis.

TABLE I

Differential Diagnosis of Hypercalcemia

1. Hyperparathyroidism (primary, secondary, tertiary)
2. Malignant disease (with & without osseous, involvement, or with ectopic hormone production)[16]
3. Multiple myeloma
4. Milk alkali syndrome
5. Sarcoidosis
6. Hyperthyroidism
7. Acute osteoporosis of disuse
8. Vitamin D ingestion
9. Acute adrenal insufficiency
10. Idiopathic hypercalcemia of infancy
11. Multiple endocrine adenoma syndrome
12. Thiazide diuretics
13. Hypophosphatasia*
14. Laboratory error

As indicated above some of these can possibly be eliminated on the basis of a complete medical history.

* A rare genetic disease of bone characterized by a lack of alkaline phosphatase in bone, plasma, and leukocytes.

The usual screening tests, such as complete blood count, urinalysis, erythrocyte sedimentation rate, SMA 12, electrocardiogram, and chest x-rays, are then ordered. In addition, a serum protein electrophoretic pattern is usually obtained. The latter may be helpful, along with the chest x-ray, to rule in (or out) a diagnosis of sarcoidosis. If the electrophoretic pattern should be suggestive of multiple myeloma, a bone marrow biopsy should be performed. If any gastrointestinal, genitourinary, or bone symptoms are present, these should be evaluated radiologically.

Radiographic studies are an important adjunct in the diagnosis or evaluation of patients with hypercalcemia. Almost any x-ray examination may suggest the presence of hyperparathyroidism if there is subperiosteal resorption, cyst formation, osteoclastomas, demineralization, or sclerotic bone changes. If malignant disease is suspected, oftentimes a metastatic survey of the bones will be helpful in showing areas of osseous involvement.

Following the above, if the diagnosis is not established, the patient is then placed on a 200 mg. calcium, 600 mg. phosphorus diet with distilled water.† After a period of five to seven days on the above diet, urinary calcium and phosphorus determinations are made and the tubular reabsorption of phosphorus calculated. Elevation of the urinary calcium level and a reduction (usually below 80 per cent) of the tubular reabsorption of phosphorus is suggestive of hyperparathyroidism, but not conclusive. At the present time, the assay procedure for parathyroid hormone is available only in a limited number of research laboratories, but will undoubtedly prove helpful when it becomes available clinically.

Selenium 75 scans of the parathyroid glands and selective arteriographic procedures are available in some centers and may be improved in the near future. Calcium infusion studies may become more valuable when parathyroid hormone determination is more readily available, since hyperplastic parathyroid glands are suppressible, whereas parathyroid adenomas usually are not. A number of other tests of lesser, or doubtful use, in the author's opinion, are the cortisone suppression test (Dent test), unresponsiveness to parathyroid hormone, and the venous occlusive test.[17]

It should also be mentioned that hyperparathyroidism has been reported with a prolonged

†*Distilled water is used in areas where the calcium content of the water is normally high.*

period of normocalcemia,[18] and in fact, according to some investigators, variance in serum calcium levels may aid in the diagnosis of hyperparathyroidism.[19]

Hypocalcemia presents much less of a diagnostic problem and usually is secondary to damage or removal of the parathyroid glands at the time of thyroid surgery. Another less frequent form is the so-called idiopathic variety of hypoparathyroidism which usually presents in childhood.

Osteomalacia, vitamin D deficiency, the Fanconi Syndrome, and azotemic osteodystrophy are other causes of hypocalcemia. There are also reported incidences of hypocalcemia secondary to osseous metastasis.[20] Pseudohypoparathyroidism, which also presents with hypocalcemia, is thought to represent an unresponsiveness of the end organ to parathyroid hormone, perhaps, to a defect in the cyclic AMP system.

Management of Hyperparathyroidism

After the above studies have been completed and the other possibilities of hypercalcemia excluded, the patient is then subjected to parathyroid exploration. The only necessary preoperative management is a low calcium diet while awaiting surgery. Surgery is the only well-established means of long term treatment. An attempt should be made to visualize all four of the parathyroid glands, since adenomas may be multiple or all glands hyperplastic. Tolonium chloride has recently been used for operative visualization, since it is selectively concentrated by the parathyroid gland along with a number of other tissues.[21] Another procedure which may subsequently prove beneficial in localizing parathyroid tumors is that of selective venous catheterization for measurements of parathyroid hormone.[22]

Once the adenoma or hyperplastic glands are exposed, the surgeon must decide on how much tissue to remove, depending on the pathological interpretation of the frozen section. If a single adenoma is found, it is usually simply removed. If all four glands are enlarged, the usual practice is to remove three and a portion of the fourth.

Postoperatively the serum calcium level usually falls to normal within several hours. During the next several days, daily calcium determinations should be made to prevent the development of overt tetany.

Summary

Parathyroid disorders and calcium abnormalities are often discovered fortuitously, or when least expected, in the process of a routine evaluation. Symptoms related to elevation or depression of the serum calcium level are often vague and nonspecific. Some aspects of calcium metabolism have been presented, along with a working differential diagnosis and management of hyperparathyroidism.

References

1. Keating, R. F.: Diagnosis of Primary Hyperparathyroidism, Clinical and Laboratory Aspects. *JAMA* 178:547-555, 1961.

2. Bates, B., and Mulinare, J.: Physicians' Use and Opinions of Screening Tests in Ambulatory Practice. *JAMA* 214:2173-2180, 1970.

3. Munson, P. L., and Hirsch, P. F.: Discovery and Pharmacologic Evaluation of Thyrocalcitonin. *Amer. J. of Med.* 43:678-683, 1967.

4. Rasmussen, Howard: The Parathyroids, Chapter 11 in *Textbook of Endocrinology*. R. H. Williams (ed.), Philadelphia, W. B. Saunders Co., 1968.

5. Collip, J. B.: Extraction of Parathyroid Hormone Which Will Prevent or Control Parathyroid Tetany and Which Regulates the Level of Blood Calcium. *J. Biol. Chem.* 63:395-438, 1925.

6. Aurbach, G. D.: Isolation of Parathyroid Hormone After Extraction with Phenol. *J. Biol. Chem.* 234:3179-3181, 1959.

7. Patt, H. M., and Luckhardt, A. B.: Relationship of Low Blood Calcium to Parathyroid Secretion. *Endocrinology* 31:384-392, 1942.

8. Copp, D. H., and Davidson, A. G. F.: Direct Humoral Control of Parathyroid Function in the Dog. *Proc. Soc. Exper. Biol. & Med.* 107:342-344, 1961

9. Aurbach, G. D., and Chase, L. R.: Cyclic 3', 5'-Adenylic Acid in Bone and the Mechanism of Action of Parathyroid Hormone. *Fed. Proc.* 29:1179-82, 1970.

10. Aurbach, G. D., and Potts, J. T., Jr.: Parathyroid Hormone. *Amer. J. Med.* 42:1-8, 1967.

11. Chase, L. R., and Aurbach, G. D.: Parathyroid Function and Renal Excretion of 3', 5'-Adenylic Acid. *Proc. Nat. Acad. Sc.* 58:518-525, 1967.

12. Potts, J. T., et al: The Aminoacid Sequence of Porcine Thyrocalcitonin. *Proc. Nat. Acad. Sc.* 59:1321-1328, 1968.

13. Bell, P. H., et al: Purification & Structure of Porcine Calcitonin — 1. *Jr. Amer. Chem. Soc.* 90:2704-06, 1968.

14. Deftos, L. J., et al: A Radioimmunoassay for Thyrocalcitonin. *Proc. Nat. Acad. Sc.* 60:293-299, 1968.

15. Gudmundsson, T. V., et al: Plasma-Calcitonin in Man. *Lancet* 1:443-445, 1969.

16. Omenn, G. S.: Ectopic Polypeptide Hormone Production by Tumors. Editorial — *Annals Int. Med.* 72:136-138, 1970.

17. Buxton, R. L., et al: Further Assessment of the Venous-Compression Test in Hyperparathyroidism. *Lancet* 2:498-99, 1970.

18. Johnson, R. D., and Conn, J. W.: Hyperparathyroidism With a Prolonged Period of Normocalcemia. *JAMA* 210:2063-2066, 1969.

19. Drach, G. W., and King, J. S., Jr.: Estimating Aberrant Homeostasis: Variance in Serum Calcium Concentration as an Aid in Diagnosis of Hyperparathyroidism. *Clinical Chem.* 16:792-796.

20. Hall, T. C., et al: Hypocalcemia—An Unusual Metabolic Complication of Breast Cancer. *NEJM* 275:1474-1477, 1966.

21. DiGiulio, W., and Lindenauer, S. M.: Use of Tolonium Chloride in Localization Parathyroid Tissue. *JAMA* 214:2302-2306, 1970.

22. Chiu-an, Wang, et al: Localization of Hyperfunctioning Parathyroids. *Amer. J. Surg.* 119:462-464, 1970.

Kleeblattschädel Syndrome†

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Kleeblattschadel syndrome, a severe form of craniosynostosis is described, the second such case reported in Kentucky. Affected infants present with a grotesquely trilobed skull and skeletal deformities. The prognosis is poor.

KLEEBLATTSCHADEL syndrome, originally described by Holtermüller and Wiedemann[1] in 1960 and termed "Cloverleaf Skull" by Comings,[2] is a rare entity characterized by a grotesque, trilobed skull, displacement of the ears downward to a position parallel to the shoulders, severe exophthalmos of the eyes with resulting corneal opacification, and a small beaked nose with a depressed nasal bridge.

Two variants of this syndrome have been noted: one presenting with anomalies limited to the head; the other presenting with abnormalities of the extremities resembling, at times, achondroplastic deformities.[3,4] Holtermüller and Wiedemann reviewed 12 cases dating back to 1824. Since that time there have been an additional 11 cases reported, seven of these in the English literature.

The purpose of this paper is to add to the literature a case that presents with both the cranial malformations and bony abnormalities of this extremely rare syndrome. It should be noted that this is the second case to occur in Kentucky.[5]

Case Report

The patient, M.S., a five pounds, one ounce white male born on July 24, 1969, was the first-born child of a 20 year old mother and a 21 year old father. Both parents were in good health with no evidence of congenital abnormalities. Both were of German descent.

The pregnancy was full-term, and delivery was spontaneous from a breech presentation. The prenatal history revealed a severe upper respiratory infection contacted late in the second month of pregnancy, accompanied by nausea and vomiting. The question was raised whether this respiratory infection was possibly influenza, since it was coincident with the Hong Kong Influenza epidemic in 1968.

Also, the mother was known to have had exposure to "measles" in her first trimester, but she was uncertain as to whether it was rubella. The family history was essentially negative for congenital anomalies, mental retardation, or other forms of delayed development.

Shortly after birth, the patient was noted to be cyanotic and in moderate respiratory distress with grunting respirations and retractions. Oxygen was administered, but the infant's condition remained poor. On July 25, 1969, a consultation was requested from the Child Evaluation Center to assess the congenital deformities and to perform chromosome analysis.

Physical examination at that time revealed that the infant was in moderate respiratory distress. The head circumference was 33 cms., chest circumference was 24 cms., abdominal circumference was 30 cms., and the crown-to-heel length was 43 cms.

The infant was jaundiced and cyanotic. The head was trilobed and markedly enlarged with a large antero-superior projection and two smaller lateral projections resembling a cloverleaf. The skull was flattened in the A-P diameter (Figures 1 and 2). The superior projection bulged through a wide-open sagittal suture. The coronal and lambdoidal sutures were not palpable.

The ears were quite low-set, displaced downward to a point almost parallel to the shoulders, the left ear displaced lower than

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Front View

the right. The helices were mildly undifferentiated, and no abnormalities of the external canals were noted except for tortuosity. Severe exophthalmos, hypertelorism, and an antimongoloid slant were present. The sclerae were icteric, and bilateral corneal opacification was noted. The pupils were reactive to light. The optic discs were not visualized well on ophthalmoscopic examination.

The nose was beaked with a small depressed base. The nares were upturned and broad. Macrostomia was present, as was a high, arched palate with an incomplete cleft. An upper central rudimentary tooth was also noted. The mandible was prognathic. The nipples were widely spaced. Bilateral inspiratory and expiratory wheezes and coarse rales were noted throughout the lung fields.

Cardiovascular examination was within normal limits. The abdomen was moderately distended with no palpable masses. The umbilical stump was inflamed and the superficial abdominal veins were distended. The external genitalia was normal infantile male, and both testes were palpable in the scrotum.

Examination of the skeletal system demonstrated generalized hypertonicity with partial ankylosis of the shoulders and knees and ankylosis of the elbows. The subcutaneous tissue was diminished. Syndactyly of the hands and feet was present bilaterally. Deep tendon reflexes were slightly diminished bilaterally. Grasp, Moro, and sucking reflexes were present.

Chromosome analysis was done. A study of 25 metaphases showed a normal male Karyotype (46XY).

The infant's condition continued to deteriorate, and he expired at three days of age. At post-mortem examination, premature closure of the coronal and lambdoidal sutures was grossly confirmed. The large superior projection of the cranium was noted to bulge through the sagittal suture. The ventricular system of the brain was dilated, and an old hemorrhagic cyst in the anterior pole of the right frontal lobe was observed. This cyst was located in that area of the brain that bulged through the sagittal suture. Other findings included severe



Lateral View

acute bilateral bronchopneumonia, acute omphalitis, and fatty metamorphosis of the liver. Death was the result of the bronchopneumonia.

Discussion

The etiology of the Kleeblattschädel syndrome is still, as yet, uncertain. In their original report of this syndrome, Holtermüller and Wiedemann[1] observed a primitive type of osteohemangioma of the skull base, associated with basilar stenosis, and believed that it represented persistence of embryonic vasculature in the membranous skull bones. They felt that this basilar stenosis was directly responsible for the obstructive hydrocephalus, and that malformation of the squamosal bones was a secondary event.

Liebaldt[6] confirmed this view and postulated the existence of an abnormal ossification center, the "os fontanelle." It is assumed that this center replaces those normally present which permit ossification of the parietal bones and portions of the occipital bone.

Characteristically, the x-ray findings of this syndrome are: 1) the unique trilobed appearance of the skull with thinning of the inner table of the skull; 2) absence of the squamous portions of the temporal bones as reported by Comings;[2] 3) a honeycombed area of bone termed lückenschädel (lacunar skull); 4) expansion of the middle cranial fossa forward and laterally;[3, 4, 5] 5) premature closure of the coronal and lambdoidal sutures, and, at times, the sagittal suture.[4]

Comings[2] also noted absence of the zygoma and orbits, as did Angle[3] who described absence of the lateral orbital wall. This is not true in all of the cases, however, for the presence of orbits has been documented, although they were quite shallow.[4] Unfortunately, in the present case, the patient died before x-rays and other studies could be performed.

The syndrome, historically, has been termed a form of chondrodystrophy, due to the bony manifestations sometimes present. In the eight cases reported in the English literature, including the present case, abnormalities of the long bones are described in three and possibly four of those cases. Feingold[4] states in reference to his first case that complete extension of the elbows was not possible. X-rays of the elbows, in that patient, revealed bilateral subluxation of the radial head and hypoplasia of the humeral capitulum.

Affected individuals with malformations limited to the cranium have been previously termed partial chondrodystrophy. Ankylosis of the elbow, knees, shoulders and hips has been noted, as have achondroplastic-like deformities[3, 4] (relative shortening and widening of the long bones). Syndactyly has also been seen in three of the cases reported in the English literature. This has ranged from partial syndactyly of the toes to complete bilateral syndactyly of both hands and feet.

As suggested by Comings,[2] therefore, the Kleeblattschädel syndrome must be differentiated not only from other severe forms of craniosynostosis, but also from achondroplasia. Many features of Apert's syndrome (acrocephalosyndactyly) are similar to those in the Kleeblattschädel syndrome. Both involve premature closure of the coronal suture, syndactyly, joint synostosis, and an abnormal cranial configuration.

The mode of inheritance in Apert's syndrome is autosomal dominant, although sporadic cases have been reported. Crouzon's disease is, likewise, known to have a variable type of autosomal dominant inheritance.

Although prior evidence failed to support a genetic origin, it is of some significance that 19 of the cases reported are of German descent. In four cases, ancestry was either not reported or was unconfirmed. In our case, both parents were found to be of German ancestry. Wollin[5] feels that the preponderance of cases in German families is, perhaps, the result of a single dominant mutation, with some secondary event a prerequisite for expression of the mutant gene.

Also of interest is the young age group of the mothers of the affected children and low birth order of the children. Of the eight cases in the English literature, one mother was 19, three were in their early 20's, and the oldest was 33. Four of the eight affected children were first born, and two of the remaining three were second born.

Family history for congenital anomalies has been negative in all but one of the English reports. Feingold[4] relates a history of "club foot, no hip sockets, and one arm without an elbow joint." Prenatal history revealed in our case a questionable exposure to "measles" and a flu-like illness in the first trimester. Angle[3] noted a history of dextroamphetamine-amobarbital medication and hydrochlorothiazide for weight reduction in the first trimester.

The prognosis for survival of affected children must be guarded. Bronchopneumonia as the cause of death has been reported in two of the American cases, and the survivors are universally found to be functioning in the severe to profound range of mental retardation. Osteotomy procedures have been attempted, and, in one instance, only exacerbated the pre-existing deformity.[3] At present, therefore, little can be offered in the way of treatment for this complex syndrome.

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Bibliography

1. Holtermüller, K., and Wiedemann, H. R.: Kleeblattschadel-Syndrom. *Med. Monatschr.* 14:439-446, 1960.
2. Comings, D. E.: The Kleeblattschadel Syndrome: A Grotesque Form of Hydrocephalus. *J. Pediat.* 67:126-129, 1965.
3. Angle, C. R., McIntire, M. S., and Moore, R. C.: Cloverleaf Skull: Kleeblattschadel-Deformity Syndrome. *Am. J. Dis. Child.* 114:198-202, 1967.
4. Feingold, M., O'Connor, J. F., Berkman, M., and Darling, D. B.: Kleeblattschadel Syndrome. *Am. J. Dis. Child.* 118:589-594, 1969.
5. Wollin, D. G., Binnington, V. I., and Partington, M. W.: Cloverleaf Skull. *J. Canad. Ass. Radiol.* 19:148-154, 1968.
6. Liebaldt, G.: Das "Kleeblatt"—Schadel syndrom, als Beitrag zur formalen Genese der Entwiklangsstorungen des Schadeldaches. *Ergebn. Allg. Path.* 45:23-38, 1964.

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EDITORIALS



A Conspiracy of Silence?

The crisis in medical malpractice litigation brings to mind the oft-repeated accusation that the medical profession practices a "conspiracy of silence" in refusing to testify against another physician.

That this accusation is unjust has been repeatedly demonstrated when qualified experts have testified against incompetence and negligence on the part of their confreres. The truly qualified expert witness, however, is selective in offering his services and refuses to participate in "nuisance" suits and those without any obvious merit.

There are, unfortunately, other physicians who will testify, for a fee, under any set of circumstances. These men are usually well-known to their fellow physicians—as well as to the legal profession. A glaring example recently came to light when a young physician, with minimal postgraduate medical training and a smattering of legal training, addressed a letter to each of the lawyers in the metropolitan area offering his "expert" assistance whenever needed. Included were his office, home, answering-service, and radio-telephone numbers.

On the other side of the coin, is the pitfall in which the unwary, though thoroughly ethical, physician may sometime find himself trapped. A well-known member of the legal profession, perhaps a personal friend, will seek a "confidential" discussion of a certain diagnosis, a surgical procedure, or a course of treatment, in general terms and without reference to a particular patient.

Armed with these generalizations, expressed with no application to an individual patient's past or present history, nor to the findings at surgery and the need for surgical judgment, the attorney may build or expand a claim against another physician for exorbitant and unjustified damages.

Most physicians find it very difficult to understand the "adversary system" of law even at its best—especially in view of the judgments awarded by some juries in recent years. When the system is clouded by conduct such as described above, however, it behooves the physician to remember that "Silence is Golden."

Medicine is dedicated to improving the quality of medical care. We cannot condone careless or negligent diagnosis or treatment. But let us keep in mind that medicine is not an exact science. It is hazardous to criticize another's work when we were not present and have no personal knowledge of the patient's history or physical findings. The less-than-perfect cosmetic or functional result may be the culmination of a lifesaving operation or heroic course of treatment.

So long as the evidence shows that most malpractice suits stem from another physician "talking out of turn," let's forget the conspiracy and just maintain "judicious" silence.

HENRY B. ASMAN, M.D.

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Departure Date

Kentucky Medical Association — Annual Meeting — September 21-23, 1971

***Rooms will not be held after 6 p.m. unless requested.**

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1971 KMA Annual Meeting **Convention Center**

September 21-23, 1971 **Louisville**

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☐ KMA Member ☐ Intern or Resident

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KENTUCKY MEDICAL ASSOCIATION
1971 ANNUAL MEETING
LOUISVILLE
SEPTEMBER 21-23, 1971

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Kentucky Medical Association
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KMA ANNUAL MEET

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Widder "flu"



relieve them all with all-season ISOCLOR®

timesule® tablet liquid



TWO ACTIVE COMPONENTS
give "four season" sufferers dependable relief

Chlorpheniramine Maleate dries runny noses and eyes, quiets sneezing, wheezing, soothes itching and reduces postnasal drip—all with a particularly low index of side effects such as drowsiness.

Pseudoephedrine HCl: decongests throughout *entire* respiratory tract, opening nasal passages, dilating bronchioles, relaxing "tight chest"—as effectively as ephedrine, but with much less CNS or cardiovascular stimulation.

COMPOSITION: Each tablet or 10 cc. (2 teaspoonsful) of liquid contains:

Chlorpheniramine Maleate 4 mg.
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In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For relief of upper respiratory and bronchial congestion associated with: the common cold, hay fever and allergies, sinusitis, influenza, and vasomotor and allergic rhinitis.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

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DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 3-4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

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A Link in the Chain

I am deeply grateful to all of you who are already busy planning the 49th Annual Convention of the Woman's Auxiliary to KMA, to be held September 20-22, at the Seelbach Hotel in Louisville. Following the example of KMA, we have moved our headquarters this year from the Kentucky Hotel.

We are looking forward to our new facilities, and to all of the wonderful events arranged by Maria Collis, Yvonne Hodge, and Ruth Ryan.

It takes the interest and efforts of many members to bring about an outstanding Convention; I thank, in advance, all of you who will help us reach this goal.

Please come and actively participate!

Convention time is the time to give, receive, evaluate, and prepare for the future. It is also a time for fellowship. I hope that you will relax, have fun, get to know one another, and go home full of enthusiasm and with a renewed sense of service.

Mrs. Charles E. Hornaday, President
Woman's Auxiliary to KMA

FORTY-NINTH ANNUAL CONVENTION PROGRAM

MONDAY, SEPTEMBER 20, 1971

12:00 noon-4:00 p.m.
Registration
Lobby, Seelbach Hotel (500 South Fourth Street)

6:00 p.m.
KEMPAC Reception, Dinner, and Seminar
Executive Inn (Watterson Expressway at Fairgrounds)
Guest Speakers—Lieutenant Governor Wendell H. Ford and Mr. Thomas D. Emberton
Topic—*"What Medicine Expects from State Government and What State Government Expects from Medicine"*

TUESDAY, SEPTEMBER 21, 1971

8:00 a.m.-4:00 p.m.
Registration
Lobby, Seelbach Hotel

8:00 a.m.
Pre-Convention Board Breakfast
Oriental Room, Second Floor, Seelbach Hotel

8:30 a.m.
Coffee and Rolls and Silent Auction
Louisville Royal Room, Mezzanine, Seelbach Hotel

10:00 a.m.
Business Meeting
Louisville Royal Room

12:15 p.m.
Luncheon and Style Show by Stewarts
Stouffers' Louisville Inn (120 West Broadway)
(Round-trip transportation will be available.)

5:30-7:00 p.m.
Reception Honoring
John S. Harter, President-Elect of KMA, and Mrs. David Stevens, President-Elect of WAKMA
Oak Room, Mezzanine, Seelbach Hotel

WEDNESDAY, SEPTEMBER 22, 1971

8:30 a.m.-12:00 noon
Registration
Lobby, Seelbach Hotel

8:30 a.m.
Coffee and Rolls and Silent Auction
Louisville Royal Room

9:00 a.m.
Business Meeting
Louisville Royal Room

11:50 a.m.
KMA President's Luncheon
Flag Room, Kentucky Hotel (430 W. Walnut Street)
Guest Speaker—Story Musgrave, M.D., U. S. Astronaut
Topic—"United States' Spaceflight Objectives, 1971-2000."

2:30-4:00 p.m.
Post-Convention Board Meeting
Louisville Royal Room

All friends and guests are cordially invited to attend all sessions, whether or not you are a member of W A K M A. Please register in the lobby. We will be HAPPY to see you.

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Annual Meeting Section



JOHN C. QUERTERMOUS, M.D.
PRESIDENT

KMA OFFICERS 1970 — 1971



Richard F. Grise, M.D.
Vice-President

PRESIDENT-ELECT
John S. Harter, M.D.
Louisville

Doctor Harter will be installed as President of the Kentucky Medical Association, Wednesday, September 22, at the President's Luncheon, held during the 1971 Annual Meeting in Louisville.

A 1928 graduate of the University of Washington School of Medicine, Doctor Harter has been in private practice in Lousville since 1945. His specialty is thoracic surgery. He is also a Clinical Professor of Thoracic Surgery at the University of Louisville School of Medicine.

He is Past-President of the Jefferson County Medical Society and of the Southern Thoracic Surgical Association. He is a Founding Member of the American Board of Thoracic Surgery and a Diplomate, American Board of Medical Examiners.

Doctor Harter is a member of the American Association for Thoracic and Cardio-Vascular Surgery, the American College of Chest Physicians, and the American Society for Advancement of Science.

He has served on the KMA Scientific Program Committee and the Interim Meeting Program Committee.

VICE-PRESIDENT
Richard F. Grise, M.D.

Doctor Grise has been active in the Association since he became a member in 1952. He received his M.D. from the Vanderbilt University School of Medicine in 1944 and a Master of Science Degree in Surgical Pathology in 1950 from the University of Virginia.

He is a Past-President of the Warren-Edmonson-Butler County Medical Society; of the Kentucky Chapter, College of Surgeons; and of the Kentucky Division of the American Cancer Society.

Doctor Grise is a Fellow of the Southeastern Surgical Congress and of the American College of Surgeons and a Diplomate of the American Board of Surgery.

He has served KMA on the Council on Scientific Assembly, Committee for Fee Schedules, Cerebral Palsy Committee, Board of Consultants. *Journal of the Kentucky Medical Association,* and the Ad Hoc Committee for Ohio Valley Regional Medical Program. He was Chairman of the Awards Committee from 1966 until he became Vice-President last year.

SECRETARY
S. Randolph Scheen, M.D., Louisville

Now serving his fourth year as KMA Secretary, Doctor Scheen is a practicing dermatologist, an Instructor in Medicine at Louisville General Hospital, and Chief of Dermatology at St. Joseph's Infirmary. A 1953 graduate of the University of Louisville School of Medicine, he is a member of the American Academy of Dermatology, the Noah Worcester Dermatologic Society, and the Alumni Association of the Mayo Foundation. Doctor Scheen serves on the KMA Judicial Council and the Claims and Utilization Review Committee.



TREASURER
Keith P. Smith, M.D., Corbin

Doctor Smith has served as KMA Treasurer since 1963. He is a former KMA Vice-President and Chairman of the Board of Trustees. A general surgeon, he has practiced for several years in Corbin, where he was the first Chief-of-Staff of the Corbin Municipal Hospital. A 1936 graduate of the University of Louisville School of Medicine, Doctor Smith is a former President of the Kentucky Academy of General Practice.



Journal Editors

EDITOR
Walter I. Hume, Jr., M.D., Louisville



Doctor Hume is serving his first year as Editor of *The Journal*. He was Assistant Editor from 1966 until he assumed his new duties in August, 1970. A 1949 graduate of Harvard Medical School, he is a general surgeon and Assistant Clinical Professor of Surgery at the University of Louisville School of Medicine. A Past-President of the Jefferson County Medical Society, Doctor Hume is presently Chairman of the KMA Committee on Medical Education and a member of the Coordinating Commission on Governmental Medical Services.

ASSOCIATE EDITOR
Henry B. Asman, M.D., Louisville



Doctor Asman assumed his duties on the Editorial Board of *The Journal* in August, 1970. He was President of KMA in 1968, Vice-President in 1961, and Secretary from 1963 until he was named President-Elect in 1967. A 1936 graduate of the University of Louisville School of Medicine, Doctor Asman has practiced colo-proctology in Louisville since 1939. He is currently Chairman of the KMA Committee on Medical Economics and a member of the Advisory Committee to the Woman's Auxiliary and the Committee on Plans and Development.

ASSISTANT EDITOR
Sam A. Overstreet, M.D., Louisville



Doctor Overstreet served as Editor of *The Journal* for eight years, Associate Editor for three years, and became Assistant Editor in August, 1970. A former KMA President and Speaker of the House of Delegates, Doctor Overstreet has been active with KMA most of his professional life. A 1923 graduate of the University of Louisville School of Medicine, he is a Past-President of the Jefferson County Medical Society. He currently serves on KMA's Awards Committee, Advisory Committee to Blue Cross, and Advisory Committee to Selective Service.

AMA Delegates

J. Thomas Giannini, M.D., Louisville

Doctor Giannini has served as a Delegate to the AMA since 1963 and was previously an Alternate Delegate. A 1938 graduate of the University of Louisville School of Medicine, he is a Fellow of the American College of Surgeons and the American Society of Plastic and Reconstructive Surgeons. He is a member of the Kentucky and Louisville Surgical Societies and is a former Chairman of the KMA Scientific Exhibits Committee.



Charles C. Rutledge, M.D., Hazard

Doctor Rutledge has served as a Delegate to the AMA since 1965. A graduate of the University of Louisville in 1946, he has served organized medicine in many capacities. He has been an Alternate Delegate to AMA, a KMA Trustee and a District Chairman for KEMPAC. He is a former President of the Pike and Perry County Medical Societies. Doctor Rutledge is a Fellow of the American College of Surgeons and a member of the Southern Medical Association. He is now serving on the Hospital Committee of KMA.



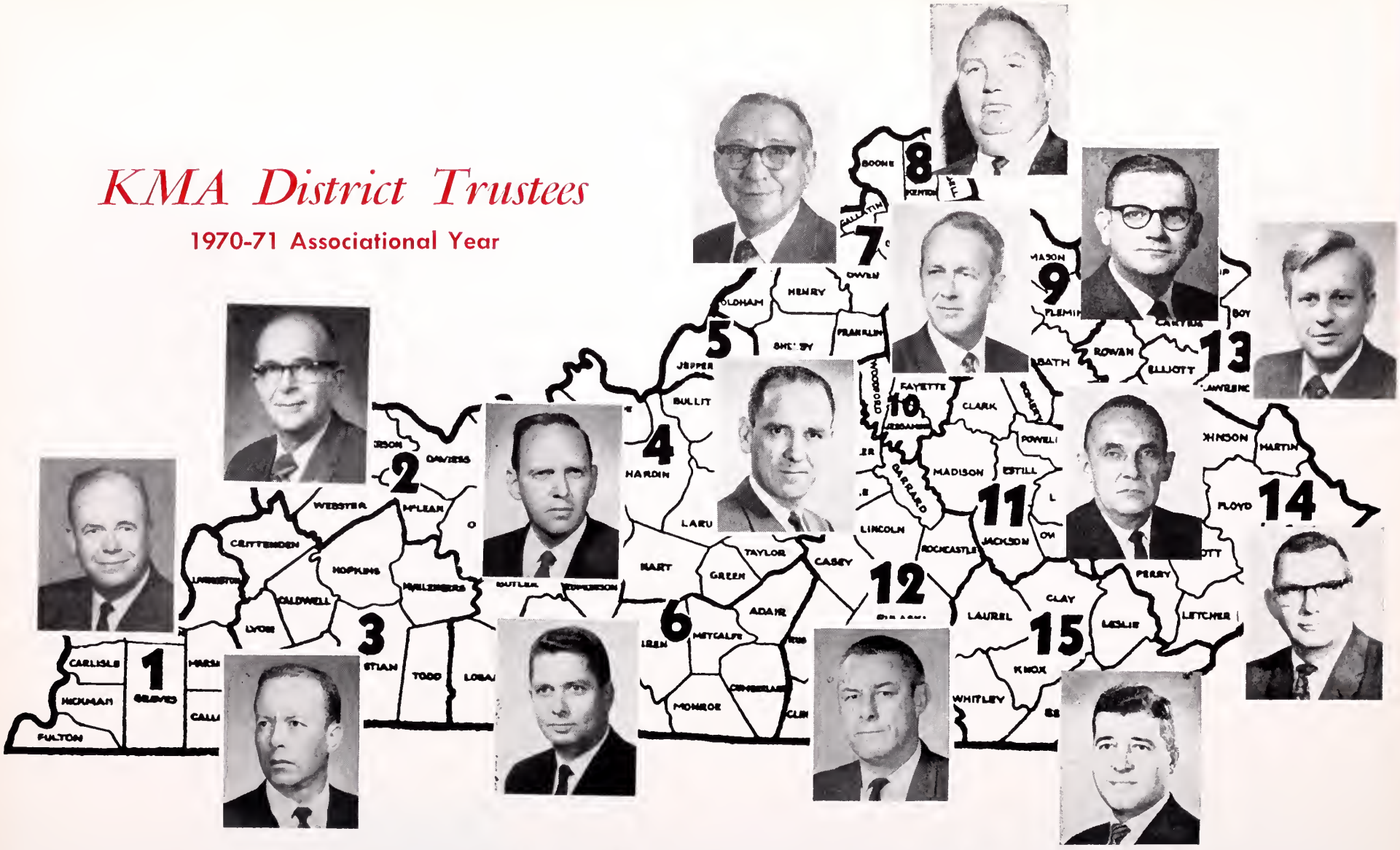
George F. Brockman, III, M.D., Greenville

Doctor Brockman was elected a Delegate to AMA in 1969. He has served KMA as President and as Speaker and Vice-Speaker of the House of Delegates. A 1935 graduate of the University of Louisville School of Medicine, Doctor Brockman is an internist. He is presently Chairman of the KMA Advisory Committee to the Woman's Auxiliary, the Ad Hoc Committee on Electronic Data Processing, and the Building Committee. He is also a member of the Committee on Medical Economics.



KMA District Trustees

1970-71 Associational Year



1. C. C. LOWRY, Murray
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15. E. C. SEELEY, London

†*Chairman of the Board of Trustees*
**Member of the Executive Committee*

New Trustees

David A. Hull, M.D., Lexington

A graduate of the University of Tennessee Medical School in 1947, Doctor Hull is a general and vascular surgeon and an Associate Clinical Professor of Surgery at the University of Kentucky Medical Center. A Fellow of the American College of Surgeons, Doctor Hull has served as Vice-President of KMA and is currently on the Committee on Legislative Activities. He is President of the Lexington Surgical Society.

Charles C. Kissinger, M.D., Henderson

A 1938 graduate of the George Washington University School of Medicine, Doctor Kissinger is a general surgeon. He is a Diplomate, American Board of Surgery; a Fellow of the American College of Surgeons; and a member of the Kentucky Surgical Society. He has served with Care-Medico Missions to Vietnam in 1964 and Afganistan in 1966.

J. Wesley Johnson, M.D., Ashland

A general surgeon, Doctor Johnson graduated from the University of Louisville School of Medicine in 1960. He is a Diplomate, American Board of Surgery and a Fellow of the Amerian College of Surgeons.

Election of Trustees and Alternate Trustees

The **House of Delegates** will elect five district trustees and five alternate trustees at its second session, Wednesday, September 22. Nominations will be made by the delegates from the electing districts at a meeting following the first session of the House on Monday, Sepember 20.

At the close of the first scientific session on Tuesday, September 21, the Committee will report its nominees. Further nominations may be made from the floor at the final meeting of the House of Delegates, Wednesday evening, September 22. All nominations are considered and acted upon by the delegates at this final session.

Districts electing trustees for three-year terms are: FIRST DISTRICT (incumbent C. C. Lowry, M.D., Murray); THIRD DISTRICT (incumbent Thornton E. Bryan, Jr., M.D., Cadiz); FOURTH DISTRICT (incumbent W. Bruce Hamilton, M.D., Shepherdsville; TWELFTH DISTRICT (incumbent Robert N. McLeod, Jr., M.D., Somerset); FOURTEENTH DISTRICT (incumbent Ballard W. Cassady, M.D., Pikeville). All are eligible for re-election.

Districts electing alternate trustees are the same as those electing trustees. Incumbents are Carroll W. Traylor, M.D., Calvert City (1st); Frederick A. Scott, M.D., Madisonville (3rd); Emmett W. Wood, M.D., Bardstown (4th); Paul J. Sides, M.D., Lancaster (12th); and James A. Holbrook, M.D., Prestonsburg (14th). All alternate trustees are also eligible for re-election.

Officers of the House of Delegates

SPEAKER

Richard F. Greathouse, M.D., Louisville



Serving his second term as Speaker of the House, Doctor Greathouse was Vice-Speaker from 1965 until he was elected Speaker. A 1951 graduate of the University of Louisville School of Medicine, Doctor Greathouse is a pediatrician and an Assistant Clinical Professor of Pediatrics at the University of Louisville. He is a Past-President of the Louisville Pediatric Society and a former Vice-Chairman of the Kentucky Chapter, American Academy of Pediatrics. He has served as Secretary-Treasurer of KEMPAC and is on KMA's Committee on School Health, Physical Education, and Medical Aspects of Sports.

VICE-SPEAKER

Carl C. Cooper, M.D., Bedford



Doctor Cooper has been active in KMA during most of his professional life. A 1952 graduate of the University of Louisville School of Medicine, he is a general practitioner. He is a former Vice-President of KMA and has served as a Delegate to AMA. He is currently serving his second term as Vice-Speaker of the House. He is a former Vice-President of the Kentucky Academy of General Practice and a member of the American Academy of General Practice.

KMA Delegates

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Millard C. Loy, Columbia

ALLEN
Earl P. Oliver, Scottsville

ANDERSON
H. Boyd Caudill, Lawrenceburg

BALLARD

BARREN
William H. Bryant, Glasgow

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BELL
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Francis Forde, Middlesboro

BOONE
Glenn F. Baird, Florence

BOURBON
Richard Wever, Paris

BOYD
C. Gordon Gussler, Ashland
Garner E. Robinson, Ashland
Charles A. Webb, Ashland

BOYLE

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BRECKINRIDGE
James G. Sills, Hardinsburg

BULLITT
R. Steven Bowen, Mt. Washington

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D. G. Miller, Jr., Morgantown

CALLOWAY
Donald Hughes, Murray

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Carl J. Brueggemann, Covington
Thomas Heavern, Jr., Highland Heights
Donald Janney, Covington
Louis J. Nutini, Erlanger
W. Vinson Pierce, Covington
R. C. Smith, Newport

CARLISLE
J. T. O'Neill, Arlington

CARROLL
Edgar S. Weaver, Carrollton

CARTER

CASEY
George Sweeney, Liberty

CLARK
Bennett N. Asher, Winchester

CLAY
W. E. Becknell, Manchester

CLINTON
Earnest A. Barnes, Albany

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R. M. Brandon, Marion

CUMBERLAND
J. Schickel, Burkesville

DAVIESS
J. S. Oldham, Owensboro
Coy Ball, Owensboro
William Pearson, Owensboro

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ELLIOTT
John F. Greene, Sandy Hook

ESTILL

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John F. Berry, Jr., Lexington
Leslie W. Blakey, Lexington
Peter P. Bosomworth, Lexington
N. Lewis Bosworth, Lexington
T. R. Bryant, Lexington
Winston L. Burke, Lexington
Donald E. Edger, Lexington
Richard D. Floyd, Lexington
Richard F. Hench, Lexington
W. Porter Mayo, Lexington
Richard B. McElvein, Lexington
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Lowell Roberts, McDowell

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Dallas C. Hagg, Frankfort
Sandford L. Weiler, Frankfort

FULTON
B. F. Bushart, Fulton

GALLATIN
John D. Fielding, Warsaw

GARRARD
O. S. Playforth, Lancaster

GRANT
Lenore P. Chipman, Williamstown

GRAVES
C. Douglas LeNeave, Mayfield

GRAYSON
Charles L. Bland, Leitchfield

GREEN
Robert L. Shuffett, Greensburg

GREENUP
Manuel S. Garcia, Flatwoods

HANCOCK
B. P. Smith, Hawesville

HARDIN
Fred C. Rainey, Elizabethtown
Walter H. Stepchuck, Harlan

HARLAN
Howard Elliot, Harlan
Walter H. Stepchuck

HARRISON
Don R. Stephens, Cynthiana

HART
Keene M. Hill, Horse Cave

HENDERSON
Kenneth Eblen, Henderson
John McClellan, Henderson

HENRY
R. L. Houston, Jr., Eminence

HICKMAN
C. J. Mills, Clinton

HOPKINS
Charles R. Fisher, Madisonville
Kenneth P. Haywood, Madisonville

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Donald L. Peterson, McKee

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Morgan R. Colbert, Louisville
Stanley W. Collis, Louisville
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Fred E. Coy, Jr., Louisville
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Andrievs J. Dzenitis, Louisville
Edward J. Fadell, Louisville
William Gillespie, Louisville
John N. Goldsborough, Louisville
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Stuart M. Hunter, Louisville
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Clyde T. Moore, Louisville
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Clinton Ray Potts, Louisville
W. Fielding Rubel, Louisville
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JOHNSON
Jerry D. Fraim, Paintsville

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D. G. Barker, Hindman

KNOX
Harold L. Bushey, Barbourville

LARUE
Marion A. Douglass, Jr., Magnolia

LAUREL
Samuel Adams, London

LAWRENCE
A. B. Richards, Louisa

LEE
Carl Noble, Beattyville

LESLIE
G. D. Bowling, Hyden

LETCHER
James B. Tolliver, Whitesburg

LEWIS

LINCOLN
T. Julian Wright, Stanford

LIVINGSTON

LOGAN
C. V. Dodson, Russellville

LYON
Robert H. Hyde, Eddyville

McCRACKEN
Donald L. Boucher, Paducah
W. Burton Haley, Paducah
Norman Parrott, Paducah

McCREARY

McLEAN
Valentino Simpao, Calhoun

MADISON

MAGOFFIN

MARION
Robert H. Wilber, Lebanon

MARSHALL
Keith Ellis, Benton

MARTIN
Raymond D. Wells, Inez

MASON
Robert Blake, Maysville

MEADE

MENIFEE

MERCER
E. H. John, Harrodsburg

METCALFE
L. P. Emberton, Edmonton

MONROE
Marcus Patton, Gamaliel

MONTGOMERY
Lon E. Roberts, Mt. Sterling

MORGAN
George Bellamy, West Liberty

NELSON
Kenneth Stinnette, Bardstown

NICHOLAS
Allen J. Hamon, Carlisle

OHIO
Robert E. Norsworthy, Hartford

OWEN
Maurice Bowling, Owenton

OWSLEY
A. L. Taulbee, Booneville

PENDELTON
W. M. Townsend, Falmouth

PENNYRILE
Caldwell: Billy G. Jackson, Princeton
Christian: James B. Cox, Hopkinsville
W. Faxon Payne, Hopkinsville
Muhlenberg:
Todd: Ralph Lynn, Elkton
Trigg: W. N. Richardson, Cadiz

PERRY
Keith Cameron, Ary

PIKE

POWELL

PULASKI
John P. Hill, Somerset
Stephen B. Kelley, Somerset

ROBERTSON

ROCKCASTLE

ROWAN
George Barber, Morehead

RUSSELL
Charles E. Peck, Russell Springs

SCOTT
John T. Sullivan, Georgetown

SHELBY
Ronald Waldridge, Shelbyville

SIMPSON
L. F. Beasley, Franklin

SPENCER
W. K. Skaggs, Taylorsville

TAYLOR

TRIMBLE
Carl Cooper, Jr., Bedford

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Nelson B. Rue, Bowling Green

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WHITLEY
R. D. Pitman, Williamsburg

WOLFE
Paul Maddox, Campton

WOODFORD
Norman S. Fisher, Midway

Number To Call Is 584-2201 In Case of Emergency

In case of an emergency or for routine messages, you may be reached at the Message Center set up for your use during the Annual Meeting. Located in the center of the Technical Exhibit Hall at the Convention Center and staffed at all times during the Meeting, the Center can be reached by calling (502) 584-2201.

Only emergency calls will be posted on the blackboard in the entrance lobby of Convention Center and in the Scientific Assembly Hall. All other messages will be kept at the Message Center until you call for them. You are asked to check there frequently for your messages.

Due to the arrangement of facilities for the Meeting, paging of individual physicians is not possible.

If you wish to locate other physicians attending the Meeting, you may do so by calling the Message Center and asking that your message be kept for pick-up.

The phone number of the Seelbach Hotel is 584-4141. You should have your calls directed to the Louisville Royal Room if you are attending the meeting of the House of Delegates on September 20 or 22. When you receive a call, your name will be posted on the blackboard at the front of the room.

You are urged to make use of the Message Center. Be sure to leave the above phone numbers at your home, office, and hospital.

KEMPAC
Reception — Dinner — Seminar
Monday, September 20
6:00 p.m.
Canterbury Room, Executive Inn
Seminar
"What Medicine Expects from State Government
and
What State Government Expects from Medicine"
Lieutenant Governor Wendell H. Ford
and
Mr. Thomas D. Emberton
All physicians and their wives are invited to attend.

REGISTRATION INFORMATION

A Registration Booth will be located in the north end of Convention Center (in the Technical Exhibit Hall) throughout the Annual Meeting. The booth will be open at 8:00 a.m. on Tuesday, Wednesday, and Thursday, September 21-23.

Please wear your badge at all times while attending the meeting.

Reference Committee Activity

All officers' and committees' reports and resolutions will be referred to one of six Reference Committees by Speaker Richard F. Greathouse, M.D., Louisville, **at the first meeting of the KMA House of Delegates at 9 a.m., Monday, September 20.**

Reference Committee Chairmen will meet for **briefing sessions at 12:30 p.m., Monday, in Room 343, Seelbach Hotel.**

Reference Committees will meet on the mezzanine floor and second floor of the Seelbach Hotel at 2 p.m., Monday, September 20. Any KMA member wishing to testify on any resolution or report is urged to be present at these meetings. In order for all who wish to speak to be heard, these open sessions will last at least one hour. The Committees will go into executive sessions, following the open hearings, to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented **at the final session of the House, Wednesday night, September 22,** in the Louisville Royal Room, Seelbach Hotel. Listed below are the Reference Committees appointed by Doctor Greathouse to serve during the 1971 session.

1971 Reference Committee Appointments

REFERENCE COMMITTEE NO. 1
Oriental Room

Winston L. Burke, M.D., Lexingtan, Chairman
Donald L. Boucher, M.D., Paducah
Eugene H. Canner, M.D., Lauisville
Fred C. Rainey, M.D., Elizabethtawn
A. B. Richards, M.D., Louisa

REFERENCE COMMITTEE NO. 2
Gold Room

James O. Willoughby, M.D., Bowling Green, Chairman
Robert M. Blake, M.D., Maysville
Peter P. Bosomworth, M.D., Lexington
C. Douglas Leneave, M.D., Mayfield
Robert G. Overstreet, M.D., Lauisville

REFERENCE COMMITTEE NO. 3
Colonial Room

W. Fielding Rubel, M.D., Louisville, Chairman
Carl J. Brueggemann, M.D., Covingtan
Jahn S. Oldham, M.D., Owensbaro
Charles B. Stacy, M.D., Pineville
Raymand D. Wells, M.D., Inez

REFERENCE COMMITTEE NO. 4
Parlor A

W. Neville Caudill, M.D., Lauisville, Chairman
Leslie W. Blakey, M.D., Lexingtan
Kenneth M. Eblen, M.D., Hendersan
Lawell D. Martin, M.D., Martin
Lauis J. Nutini, M.D. Erlanger

REFERENCE COMMITTEE NO. 5
Louisville Royal Room

Frank A. Bechtel, M.D., Lauisville, Chairman
Billy G. Jacksan, M.D., Princeton
Stephen B. Kelley, M.D., Samerset
Richard B. McElvein, M.D., Lexingtan
Walter H. Stepchuck, M.D., Harlan

REFERENCE COMMITTEE NO. 6
Junior Ballroom

W. Vinsan Pierce, M.D., Cavingtan, Chairman
Glenn W. Bryant, M.D., Louisville
James B. Cox, M.D., Hopkinsville
Jerry D. Fraim, M.D., Paintsville
J. Sankey Williams, M.D., Nichalasville

OFFICIAL CALL
KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of the KMA will convene on Tuesday, Wednesday, and Thursday, September 21, 22 and 23, at Convention Center, Louisville. The first general session will be called to order at 8:50 a.m., Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 9:00 a.m., Monday, September 20. The second regular business session will begin at 7:00 p.m., Wednesday, September 22. A subscription dinner will be served to the delegates preceding the session at 6:00 p.m. Both sessions will be held in the Louisville Royal Room of the Seelbach Hotel.

Registration

The registration desk will open outside the Louisville Royal Room of the Seelbach Hotel at 8:00 a.m., Monday, September 20, and at 5:30 p.m., Wednesday, September 22. It will be open in the Technical Exhibit Hall of Convention Center from 8:00 a.m. to 5:00 p.m., Tuesday, Wednesday, and Thursday, September 21-23.

House To Elect New Officers At KMA Annual Meeting

The House of Delegates will elect the KMA officers for the 1971-72 Associational year at the close of its final session Wednesday evening, September 22. Officers to be selected this year are:

President-Elect	**(Eastern District)**	**One Year**
Vice-President	**(Central District)**	**One Year**
Speaker, House of Delegates	***(Richard F. Greathouse, Louisville)**	**Three Years**
Vice-Speaker	***(Carl Cooper, Jr., Bedford)**	**Three Years**
Delegate to AMA	***(George F. Brockman, Greenville)**	**Two Years**
Alternate Delegate	***(Daryl P. Harvey, Glasgow)**	**Two Years**
Delegate to AMA	***(Charles C. Rutledge, Hazard)**	**Two Years**
Alternate Delegate	***(David B. Stevens, Lexington)**	**Two Years**

***Incumbent**

AMA Delegates and Alternates from KMA are to be elected for the term of two years, from January 1, 1972, to December 31, 1973.

The KMA Bylaws provide that the Trustees to be elected will be nominated by the Delegates of their respective Districts at the time of the Annual Meeting. The Bylaws further provide that it is the obligation of the Districts to communicate to the Nominating Committee their nominations at the Annual Meeting. Alternate Trustees will be nominated in this same manner.

Nominating Committee To Meet After First Session Of House

An open meeting of the KMA Nominating Committee will be held following the close of the first session of the House of Delegates, Monday, September 20, in the rear of the Louisville Royal Room of the Seelbach Hotel.

Any KMA member has the privilege of conferring with the Committee during this meeting. Final recommendations of the Commitee will be reported at the end of the first scientific session, Tuesday morning, September 21.

Nominations may be made from the floor at the second meeting of the House of Delegates, Wednesday evening, September 22. The House will vote on the nominees at the close of this session.

Members of the Nominating Committee, chaired by John M. Baird, M.D., Danville, are: John H. Doyle, M.D., Louisville; Kenneth M. Eblen, M.D., Henderson; Fred C. Rainey, M.D., Elizabethtown; and Carl H. Scott, M.D., Lexington.

Save Time At Annual Meeting Pre-Register Today

You can avoid standing in a long line at the Annual Meeting registration desk by completing the postcard on page 599 and sending it to the KMA Headquarters Office as soon as possible.

Your badge will be ready at the window marked "Pre-Registration" on your arrival at the meeting. You are urged to take advantage of this opportunity and send the postcard today.

Delegates to KMA and members of the Board of Trustees do not need to pre-register, as this is automatically done for them.

Take This Issue Home To Your Wife

John C. Quertermous, M.D., KMA President, urges you to take this issue of *The Journal* home for your wife to read. Many activities planned during the Annual Meeting will be of interest to her. The program for the 49th Annual Convention of the Woman's Auxiliary to KMA is on page 602.

Annual Meeting



Special Features

The Seelbach Hotel
KMA Annual Meeting Headquarters

THE SCIENTIFIC PROGRAM, to be held September 21, 22, and 23, will feature prominent guest speakers from throughout the world. Presented in the Convention Center, the scientific sessions will deal with such timely topics as "Cancer Symposium—Aids to Diagnosis," "Hypertension," and "Drug Abuse." An "Ask the Expert" Session will be held this year during the Wednesday afternoon session.

SIXTEEN SPECIALTY GROUPS have scheduled meetings on the afternoons of September 21 and 23. No general session is scheduled for either afternoon. **All KMA members are invited to attend any of the specialty group meetings.**

THE HOUSE OF DELEGATES, KMA's top policy-making body, will meet at 9 a.m., Monday, September 20, and 7 p.m., Wednesday, September 22, in the Louisville Royal Room of the Seelbach Hotel. New KMA officers (1971-72) will be elected at the second session.

THE PRESIDENT'S LUNCHEON will feature Story Musgrave, M.D., U. S. Astronaut. Doctor Musgrave's topic is "United States' Spaceflight Objectives, 1971-2000." The Luncheon, which will be held at 11:50 a.m., Wednesday, September 22, in the Flag Room of the Kentucky Hotel, will also feature the presentation of KMA's top three awards and the installation of KMA's new President.

SIXTY-FIVE TECHNICAL EXHIBITS of a variety of medical products and services will be on display in Convention Center during the Annual Meeting. Members and guests will have the opportunity to view products of interest and hear the latest information about recent advances in many medical fields at the 30-minute intermissions scheduled during each general and specialty group session.

ALUMNI REUNIONS will be held for the five-year classes of the University of Louisville School of Medicine.

THE WOMEN'S AUXILIARY TO KMA will hold its 49th Annual Convention, September 20, 21, and 22 at the Seelbach Hotel. Special entertainment and business sessions have been planned.

Orientation Program Scheduled For September 20

The twelfth KMA Orientation Program will be held September 20, in the Rathskeller of the Seelbach Hotel, prior to the opening session of the 1971 Annual Meeting. More than 140 new KMA members will have an opportunity to attend this year's program.

The KMA Orientation Committee has planned what they feel is a most informative and interesting program. The Committee has asked a number of distinguished guests to address this year's session, which will include an address by John C. Quertermous, M. D., President of KMA. It is the hope of the Committee that the program will better equip new members to meet their responsibilities as citizens and as physicians.

Letters of invitation have been sent to all KMA members who have joined the Association during the past two years and have not attended an Orientation Program. All eligible KMA members are invited to attend the program whether or not they received an invitation.

Registration for the Orientation Program will be held at 8:00 a.m., September 20. The program will begin promptly at 8:30 a.m. and will adjourn at noon. Following is a schedule of this year's program.

Twelfth KMA Orientation Program

Wyatt Norvell, M.D., New Castle
Moderator

8:00 a.m. **Registration**

8:25 a.m. **Call to Order**

8:30 a.m. **Welcome and Introduction**
John C. Quertermous, M.D., Murray
KMA President

STRUCTURE—FUNCTION—POLICIES IN ORGANIZED MEDICINE

8:40 a.m. **"Your KMA"**
Henry B. Asman, M.D., Louisville
Narrator, KMA Past-President

9:05 a.m. **"County Medical Society and Community Relations"**
Wyatt Norvell, M.D., New Castle
Chairman, KMA Orientation Committee

9:20 a.m. **"American Medical Association"**
J. Thomas Giannini, M.D., Louisville
AMA Delegate

9:35 a.m. **"Health Insurance" (Blue Cross-Blue Shield)**
G. Douglas Sutherland, Louisville
Asst. Director, External Operations
Blue Cross and Blue Shield

9:50 a.m. **"Health Insurance" (Commercial)**
Charles N. Parker, Louisville
The Travelers Insurance Company

10:05 a.m. **COFFEE BREAK**

10:20 a.m. **"Peer Review"**
Marvin A. Bowers, Jr., M.D., Louisville
Chairman, KMA Claims and Utilization Review Committee

10:35 a.m. **"Cults"**
David B. Stevens, M.D., Lexington
Chairman, KMA Cults Committee

10:50 a.m. **"Medico-Legal Aspects and Ethics"**
E. Gaines Davis, Jr., Frankfort
KMA Legal Counsel

11:00 a.m. **Clyde C. Sparks, M.D., Ashland**
Member, KMA Judicial Council

11:15 a.m. **"The Physician's Role in Legislation and Politics"**
Fred C. Rainey, M.D., Elizabethtown
Chairman for State Affairs
KMA Committee on Legislative Activities

11:25 a.m. **Question and Answer Period**

Candidates To Address 1971 KEMPAC Seminar



Lt. Governor Ford



Mr. Emberton

Kentucky's gubernatorial candidates, Lieutenant Governor Wendell H. Ford (D) and Thomas D. Emberton (R), will be the guest speakers at the annual KEMPAC Seminar which precedes the KMA Annual Meeting.

C. Kenneth Peters, M. D., Louisville, Chairman of the KEMPAC Board of Directors, has announced that a reception, followed by a dinner and the Seminar, will begin at 6:00 p.m., Monday, September 20, in the Canterbury Room of the Executive Inn, Louisville.

Lieutenant Governor Ford and Mr. Emberton have been asked to discuss, "What Medicine Expects from State Government and What State Government Expects from Medicine."

A native of Owensboro, Lieutenant Governor Ford attended the University of Kentucky and graduated from the Maryland School of Insurance. He is President of the State Senate, Chairman of the Legislative Research Commission, Vice-Chairman of the Kentucky Turnpike Authority, and a member of the Archives and Records Commission and State Property and Buildings Commission. He also serves on the Executive Committee of the National Lieutenant Governors' Conference.

Mr. Emberton is a native of Tompkinsville and a graduate of Western Kentucky University. He received his Law Degree from the University of Louisville, practiced law in Edmonton, and was elected County Attorney of Metcalfe County. In 1967, he was appointed Executive Assistant to Governor Louie B. Nunn and was subsequently appointed to the Commonwealth's Public Service Commission and opened a law practice in Frankfort.

The KEMPAC Board of Directors urges all physicians and their wives to make plans now to attend this informative affair.

1971 Annual Meeting Program Summary

The Kentucky Medical Association

September 19, 20, 21, 22, and 23

Louisville

SUNDAY, SEPTEMBER 19

12:30 p.m. Luncheon Meeting, KMA Board of Trustees Oak Room, Seelbach Hotel

MONDAY, SEPTEMBER 20

8:30 a.m. Orientation Program, New KMA Members Rathskeller, Seelbach Hotel
9:00 a.m. First Meeting, KMA House of Delegates Louisville Royal Room, Seelbach Hotel
12:30 p.m. Luncheon for Reference Committee Chairmen Room 343, Seelbach Hotel
2:00 p.m. Reference Committee Meetings Louisville Royal Room, Junior Ballroom, Oriental Room, Gold Room, Colonial Room, and Parlor A, Seelbach Hotel
6:00 p.m. KEMPAC Reception, Banquet, and Seminar Canterbury Room, Executive Inn

TUESDAY, SEPTEMBER 21

8:00 a.m. Registration Technical Exhibit Hall, Convention Center
8:50 a.m. Opening Ceremonies Scientific Assembly Hall, Convention Center
9:00 a.m. First Scientific Session Scientific Assembly Hall, Convention Center
12:00 noon Board of Trustees Luncheon and Meeting Oriental Room, Seelbach Hotel
2:00 p.m. Specialty Group Sessions, Convention Center (Eight Specialty Group Sessions will be held simultaneously at this time. KMA members may attend any of these meetings. There will be no General Session at this time. See pages 618-620 in program.)
5:30 p.m. Reception honoring John S. Harter, M.D., and Mrs. David Stevens Oak Room, Mezzanine, Seelbach

WEDNESDAY, SEPTEMBER 22

9:00 a.m. Second Scientific Session Scientific Assembly Hall, Convention Center
11:50 a.m. President's Luncheon Flag Room, Kentucky Hotel
2:00 p.m. Third Scientific Session Scientific Assembly Hall, Convention Center
5:00 p.m. Meeting, Board of Trustees Oriental Room, Seelbach Hotel
6:00 p.m. Dinner, Board of Trustees Junior Ballroom, Seelbach Hotel
6:00 p.m. Subscription Dinner, House of Delegates Oak Room, Seelbach Hotel
7:00 p.m. Meeting, House of Delegates Louisville Royal Room, Seelbach Hotel

THURSDAY, SEPTEMBER 23

9:00 a.m. Fourth Scientific Session Scientific Assembly Hall, Convention Center
12:00 noon Board of Trustees Luncheon and Afternoon Meeting Junior Ballroom, Seelbach Hotel
2:00 p.m. Specialty Group Sessions, Convention Center (Eight Specialty Group Sessions will be held simultaneously at this time. KMA members may attend any of these meetings. There will be no General Session. See pages 622-623 in program.)

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits.

(Full Scientific Program Starts on page 618.)

The Kentucky Medical Association

SCIENTIFIC PROGRAM

George Beeler Memorial Meeting

Convention Center, Louisville

TUESDAY, SEPTEMBER 21
MORNING SESSION

General Session

John C. Quertermous, M.D., Murray, KMA President, Presiding

8:50 **Opening Ceremonies**
Welcome—Glenn W. Bryant, M.D., President, Jefferson County Medical Society
Invocation—To Be Announced

9:00 **"Status Asthmaticus"**
Martin I. Gold, M.D., Baltimore, Md.

9:20 **"Prenatal Diagnosis of Fetal Defects"**
Albert B. Gerbie, M.D., Chicago, Ill.

9:40 **"Sports Medicine"**
Jack C. Hughston, M.D., Columbus, Ga.

10:00 **Intermission to Visit Exhibits**

Theme: "CANCER SYMPOSIUM—AIDS TO DIAGNOSIS"

10:30 **"Efficacy of Bone Marrow Examination for Diagnosis and Staging of Patients with Lung Cancer"**
Oleg S. Selawry, M.D., Washington, D. C.

10:50 **"New Aids in the Diagnosis of Lung Cancer"**
Eugene C. Klatte, M.D., Nashville, Tenn.

11:10 **"Aids to Diagnosis in Cancer"**
William W. Scott, M.D., Baltimore, Md.

11:30 **"Diagnosis of Neoplasia of the Colon"**
Merrill O. Hines, M.D., New Orleans, La.

TUESDAY, SEPTEMBER 21
AFTERNOON SESSION

Eight Specialty Group Meetings

(The scientific programs of eight specialty groups, beginning at 2:00 p.m., will feature prominent guest speakers from throughout the country. All KMA members are invited to attend the specialty group meetings of their choice. There will be no general scientific session at this time.)

Kentucky Society of Anesthesiologists
Room 101, Convention Center

2:00 **"Pulmonary Mechanics as Influenced by Anesthesia"**
Martin I. Gold, M.D., Baltimore, Md.

3:00 **Intermission to Visit Exhibits**

3:30 **Business Meeting**

MARTIN I. GOLD, M.D.
Pikesville, Maryland



Professor of Anesthesiology, University of Maryland School of Medicine. M.D., 1954, State University of New York College of Medicine. Medical Director, Inhalation Therapy and Division of Acute Respiratory Care, and Chairman, Committee on Hospital Respiratory Care, University of Maryland Hospital. Member and Past-President, Maryland Society of Anesthesiologists. Chairman, Chronic Obstructive Pulmonary Disease Committee, Maryland Thoracic Society. Member, American Society of Anesthesiologists and Association of University Anesthetists.

ALBERT B. GERBIE, M.D.
Chicago, Illinois



Associate Professor of Obstetrics and Gynecology, Northwestern University Medical School. M.D., 1951, George Washington University School of Medicine. Fellow, American Association of Obstetricians and Gynecologists. Member, Association of Professors of Gynecology and Obstetrics. Associate Editor, American Journal of Obstetrics and Gynecology and Surgery, Gynecology and Obstetrics.

JACK C. HUGHSTON, M.D.
Columbus, Georgia



A practicing orthopaedic surgeon. M.D., 1943, Louisiana State University School of Medicine. Orthopaedic Consultant to Auburn University Athletic Association. Chairman, Committee on Sports Medicine, American Academy of Orthopaedic Surgeons. Originator and former Chairman, Medical Aspects of Sports Committee, Georgia Medical Association. Member, Committee on Medical Aspects of Sports, American Medical Association. Member, American College of Surgeons, American Academy of Orthopaedic Surgeons, American College of Sports Medicine, and American Board of Orthopaedic Surgeons.

Kentucky Chapter, American College of Chest Physicians
Room 104, Convention Center

2:00 **Simultaneous Roundtable Conferences**
"Surgical Aspects of Branchiectasis"
Robert P. Belin, M.D., Lexington
Paul M. Walstad, M.D., Harlan
"Tuberculosis in Kentucky After Hazelwood"
Jorge Mattelanos, M.D., Louisville
"Clinical Cardiology"
Robert R. Goodin, M.D., Louisville
Thomas V. Inglesby, M.D., Louisville
"Electracardiography"
(Bring your problem tracings.)
Armond T. Gordon, M.D., Louisville
"Blood Gases"
Douglas David, M.D., Louisville
Norman K. Kirby, M.D., Harlan

3:00 **Intermission to Visit Exhibits**

3:30 **Resume Meeting of Simultaneous Roundtable Conferences**

4:15 **Business, Meeting, Kentucky Chapter, American College of Chest Physicians**

Kentucky Obstetrical and Gynecologic Society
Room 204, Convention Center

2:00 **"Advances in Conceptian Contral"**
Albert B. Gerbie, M.D., Chicago, Ill.

3:00 **Intermission to Visit Exhibits**

3:30 **Panel on Induced Abortion—A Debate**
John W. Greene, Jr., M.D., Lexington
Albert B. Gerbie, M.D., Chicago, Ill.
Silas H. Starr, M.D., Louisville
N. Z. Kafoglis, M.D., Bowling Green
Philip S. Crossen, M.D., Lexington

4:15 **Business Meeting**

Kentucky Orthopaedic Society
Room 207, Convention Center

2:00 **"Charnley Total Hip Replacement"**
Richard Welch, M.D., San Francisco, Calif.

2:20 **"Surgical Treatment to the Cervical Injury"**
Noboru Nakano, M.D., Sapparo, Japan

2:40 **"Double Onlay Bone Graft in the Treatment of Non-Union of Fractures of the Humerus"**
K. Armand Fischer, M.D., Louisville
Kenton D. Leatherman, M.D., Louisville
Wayne W. Kotcamp, M.D., Louisville

3:10 **Intermission to Visit Exhibits**

3:40 **"Sparts Medicine"**
Jack C. Hughston, M.D., Columbus, Ga.

4:00 **"Carcinoma in Chronic Osteomyelitis—Significance of Bacterial Flora"**
Bernard L. Manale, M.D., Lexington

Kentucky Chapter, American Academy of Pediatrics
Assembly Hall, Convention Center

2:00 **"Normal and Abnormal Development of the Thymus System"**
Max Cooper, M.D., Birmingham, Ala.

2:30 **"Secretory Immune Globulin System"**
Kenneth Gerson, M.D., Lexington

3:00 **Intermission to Visit Exhibits**

3:30 **"Normal and Abnormal Development of Antibody Producing Cells"**
Max Cooper, M.D., Birmingham, Ala.

4:00 **"Clinical Application of the New Immunology to Viral Infection**
H. Garrett Adams, M.D., Louisville

OLEG S. SELWARY, M.D.
Washington, D.C.



Chief of Medical Oncalagy, Veterans Administratian Haspital. M.D., 1948, University af Tuebingen, Germany. Member, NCI Operations Cammittee, NIH; Decisian Netwark Cammittee, NCI, NIH; Experimental Design Cammittee, NCI, NIH; and Specialty Fellawship Baard, NCI, NIH. Member, Americon Associotion for Cancer Reseorch, Americon Federatian far Clinical Research, New York Academy af Science, American Society af Clinicol Oncalagy, and American Society of Hematalagy. Author and co-author af 77 scientific articles.

EUGENE C. KLATTE, M.D.
Nashville, Tennessee



Professor and Chairman, Department of Radiology, Vonderbilt University Schaal af Medicine. M.D., 1952, Indiono University Schaal af Medicine. Diplamate, American Board of Radiology. Member, Baord af Choncellars, Americon College of Radiology. Member, Associotion af University Radialagists and Society af Chairmon af Acodemic Radiology Deportments. Chairman, Liaisan Cammittee with Tennessee Departiment af Public Health and Tennessee Regional Medical Programs far Continuing Educotion, Tennessee Radiologicol Society.

WILLIAM W. SCOTT, M.D.
Baltimore, Maryland

Professar af Uralagy, Jahns Hapkins University Schaal af Medicine; Uralogist-in-Charge, Jahns Hapkins Haspital. M.D., 1939; Ph.D., 1938, University af Chicago Schaal af Medicine. Member and Past-President, Mid-Atlantic Sectian af the Americon Uralagicol Associatian. Member, American Associatian af Genita-Urinary Surgeans, American Associotian for Cancer Research, Inc., and American Physialogy Society. Editar, Investigative Uralagy; Associate Editar, Jaurnal af Uralagy.



MERRILL O. HINES, M.D.
New Orleans, Louisiana



Medicol Director, Oshsner Clinic; Prafessar of Clinical Surgery, Tulane University Schaal af Medicine. M.D., 1936, Tulane University Schaal af Medicine. Diplomate, Americon Baard af Colan and Rectal Surgery. Fellaw, American College af Surgeans. Secretory, Americon Cancer Saciety, Lauisiana Divisian. Member, Health Insurance Benefits Advisary Cauncil. Consultant ta Department af Health, Educatian, and Welfare an the graup practice af medicine. Member, Editarial Baard, The Jaurnal of Diseases af Colon and Rectum.

Kentucky Chapter, American College of Radiology
Room 208, Convention Center

2:00 "Techniques in the Diagnosis of Mediastinal Masses"
Eugene C. Klatte, M.D., Nashville, Tenn.

3:00 Intermission to Visit Exhibits

3:30 "Angiography in the Diagnosis of Extra-uterine Pregnancy"
Chalmer S. Wheeler, M.D., Louisville

4:00 "Total Anomalous Pulmonary Venous Return"
James F. Hudgens, Jr., M.D., Lexington

Kentucky Urological Association
Room 203, Convention Center

2:00 "Medical Management of Prostatic Cancer and Benign Prostatic Hyperplasia"
William W. Scott, M.D., Baltimore, Md.

3:00 Intermission to Visit Exhibits

3:30 Pyelogram Clinic

4:00 Business Meeting

Ohio Valley Proctologic Society
Room 205, Convention Center

2:00 "Ano-rectal Surgery in Conjunction with Vaginal Surgical Procedures"
Mauricio Salazar, M.D., Louisville

2:20 "Government and Medicine"
Merrill O. Hines, M.D., New Orleans, La.

3:00 Intermission to Visit Exhibits

3:30 "Current Concepts of Etiology and Therapy of Pruritus Ani"
Sidney M. Copland, M.D., Dayton, Ohio

3:50 "Rehabilitation of the Ostomy Patient"
Kathy Mershon, R.N., M.S.N., Louisville

4:10 Business Meeting

WEDNESDAY, SEPTEMBER 22
MORNING SESSION

General Session

Richard F. Grise, M.D., Bowling Green, KMA Vice-President, Presiding

9:00 "Peptic Esophagitis"
Lloyd M. Nyhus, M.D., Chicago, Ill.

9:20 "Current Problems in Infectious Diseases"
Edward W. Hook, M.D., Charlottesville, Va.

9:40 "Pitfalls in Dermatological Therapy"
Sture A. M. Johnson, M.D., Madison, Wis.

10:00 Intermission to Visit Exhibits

10:30 "Defects of Plasma Cell Development"
Max Cooper, M.D., Birmingham, Ala.

10:50 "Patterns of Coronary Arterial Disease and Their Surgical Significance"
Michael E. DeBakey, M.D., Houston, Tex.
(Griswold Memorial Lecture)

11:20 "Current Status of Rubeola in the U.S."
Shelby Wyll, M.D., Atlanta, Ga.

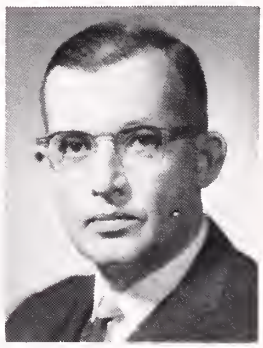
11:40 Adjournment for President's Luncheon

LLOYD M. NYHUS, M.D.
Chicago, Illinois



Professor and Head of the Department of Surgery, University of Illinois College of Medicine; Surgeon-in-Chief, University of Illinois Hospital. M.D., 1947, Medical College of Alabama. Diplomate, American Board of Surgery. Fellow, American College of Surgeons and Royal Society of Medicine. Member and Past-President, Society of University Surgeons. Member, American Gastroenterological Association and American Surgical Association. Author of 201 scientific articles and book chapters, six books and four movies.

EDWARD W. HOOK, M.D.
Charlottesville, Virginia



Professor and Chairman, Department of Medicine, University of Virginia School of Medicine; Physician-in-Chief, University of Virginia Hospital. M.D., 1949, Emory University School of Medicine. Member, American College of Physicians, American Federation for Clinical Research, American Thoracic Society, Society for Experimental Biology and Medicine, and American Society for Clinical Investigation. Author and co-author of 91 scientific articles.

STURE A. M. JOHNSON, M.D.
Madison, Wisconsin



Professor and Chairman, Department of Dermatology, University of Wisconsin Medical School and Center. M.D., 1938, University of Oregon Medical School. Diplomate, Pan American Medical Association. Fellow, American College of Physicians. President, Wisconsin Dermatological Society. Vice-President and member, Board of Directors, Society Investigative Dermatology. Vice-President, Chicago Dermatological Society. Member, Board of Directors, American Academy of Dermatology. Specialty Editor, Postgraduate Medicine.

MAX D. COOPER, M.D.
Birmingham, Alabama



Professor, Department of Pediatrics, and Associate Professor, Department of Microbiology, University of Alabama in Birmingham. M.D., 1957, Tulane University Medical School. Diplomate, American Board of Pediatrics. Member, Society for Pediatric Research, American Association of Immunologists, American Society for Experimental Pathology, American Association for the Advancement of Science, Central Society for Clinical Research, and American Society for Pediatric Research.

PRESIDENT'S LUNCHEON

Flag Room, Kentucky Hotel
11:50 A.M.

John C. Quertermous, M.D., Murray
KMA President, Presiding

Invocation
To Be Announced

Recognition
John C. Quertermous, M.D.

Awards Presentation
Douglas E. Scott, M.D., Lexington
Chairman, KMA Awards Committee

"United States' Spaceflight Objectives, 1971-2000"
Story Musgrave, M.D., U.S. Astronaut

Installation of New KMA President
Lee C. Hess, M.D., Florence

AFTERNOON SESSION

General Session

Robert N. McLeod, Jr., M.D., Somerset,
KMA Board of Trustees, Presiding

2:15 **"New Approaches to Surgery for Duodenal Ulcer"**
Lloyd M. Nyhus, M.D., Chicago, Ill.

2:45 **Scientific Exhibits Award Presentation**

2:50 **"Salmonella Infections"**
Edward W. Hook, M.D., Charlottesville, Va.

3:20 **Intermission to Visit Exhibits**

3:50 **ASK THE EXPERT**

"Pulmonary Diseases"
Judah L. Skolnick, M.D., Louisville

"Office and General Surgery"
Norton G. Waterman, M.D., Louisville

"Gastrointestinal Diseases"
Samuel H. Cheng, M.D., Louisville

"Dermatology"
Maurice T. Fliegelman, M.D., Louisville

"Allergy"
A. F. White, M.D., Louisville

"Pediatrics"
Richard S. Wolf, M.D., Louisville

"Neurology"
Gary Fox, M.D., Louisville

"GU Surgery"
Lonnie W. Howerton, Jr., M.D., Louisville

"Gynecology"
Charles R. Oberst, M.D., Louisville

"Psychiatry"
William K. Keller, M.D., Louisville

"Cardiology"
Henry W. Post, M.D., Louisville

"Colon and Rectal Surgery"
William J. Ashbrook, M.D., Louisville

"Hematology"
Charles E. Dobbs, M.D., Louisville

"Physical Medicine and Rehabilitation"
Thomas A. Kelley, Jr., M.D., Louisville

"Rheumatology"
David H. Neustadt, M.D., Louisville

"The Papulo-Squamous Diseases"
Sture A. M. Johnson, M.D., Madison, Wis.

MICHAEL E. DEBAKEY, M.D.
Houston, Texas



President, Baylor College of Medicine; Professor and Chairman, Department of Surgery, Baylor College of Medicine; Director, Cardiovascular Research and Training Center, Methodist Hospital, Houston. M.D., 1932, and M. Sc., 1935, Tulane University School of Medicine. Member, Executive Committee, Committee for National Health Insurance. Member, Council of Directors and Administrators, Texas Medical Center, Surgical Consultant to Surgeon General, U.S. Army. Editor, Year Book of General Surgery. On the Editorial Boards of 13 publications.

STORY MUSGRAVE, M.D.
Houston, Texas



U.S. Scientist-Astronaut; part-time resident in general surgery, Denver General Hospital; and part-time Instructor, Department of Physiology and Biophysics, University of Kentucky Medical Center. M.D., 1964, Columbia University College of Medicine; M. Sc., 1966, University of Kentucky. Member, Aerospace Medical Association, American Association for the Advancement of Science, and American Institute of Aeronautics. Recipient, United States Air Force Post-doctoral Fellowship and National Heart Institute Post-doctoral Fellowship.

WALTER M. KIRKENDALL, M.D.
Iowa City, Iowa

Professor of Medicine, Director, Renal-Hypertension-Electrolyte Division, University of Iowa Hospitals. M.D., 1941, University of Louisville School of Medicine. Fellow, American College of Physicians and American College of Cardiology. Member, American Association of University Professors, American Association for Advancement of Science, American Federation for Clinical Research, and American College of Chest Physicians. Author of numerous scientific articles and editorials.

No Photo Available

JOHN G. BATSAKIS, M.D.
Ann Arbor, Michigan



Professor of Pathology, University of Michigan Medical School. M.D., 1954, University of Michigan Medical School. Fellow, American Society of Clinical Pathologists and College of American Pathologists. Member, Academic Clinical Laboratory Physicians and Scientists, American Ordnance Association, Association of Clinical Scientists, Association of Military Surgeons of the United States, and National Association for the Advancement of Science. Board of Editors, Laboratory Medicine and Ann Arbor Science Publishing Co.

THURSDAY, SEPTEMBER 23
MORNING SESSION

General Session

Lee C. Hess, M.D., Florence,
Chairman, KMA Board of Trustees, Presiding

Theme: "HYPERTENSION"

9:00 **"Mechanisms of Action of Antihypertensive Drugs"**
Walter M. Kirkendall, M.D., Iowa City, Iowa

9:20 **"Endocrine Causes of Hypertension"**
John G. Batsakis, M.D., Ann Arbor, Mich.

9:40 **"Renovascular Hypertension — Diagnosis and Treatment"**
John H. Foster, M.D., Nashville, Tenn.

10:00 **Intermission to Visit Exhibits**

10:30 **"Health Sciences Center"**
Harold E. Boyer, D.D.S., Louisville

10:50 **"Pesticides and Human Poisoning"**
Gordon W. Richmond, M.D., San Francisco, Calif.

Theme: "DRUG ABUSE"

11:10 **"Newer Treatment Approaches for Drug Addiction"**
Harold T. Conrad, M.D., Lexington

11:30 **"Office Management of Narcotic Addiction"**
Edward Gordon, M.D., White Plains, N.Y.

THURSDAY, SEPTEMBER 23
AFTERNOON SESSION

Eight Specialty Group Meeting

(Eight specialty groups will meet at 2:00 p.m. with outstanding speakers appearing on their programs. All KMA members are invited to these meetings. No general session will be held.)

Kentucky Dermatological Society
General Hospital

2:00 **Clinical Case Presentations**
Maurice T. Fliegelman, M.D., Louisville, Moderator

3:00 **Intermission to Visit Exhibits**

3:30 **General Discussion of Cases Presented**
Sture A. M. Johnson, M.D., Madison, Wis.

Kentucky Chapter,
American Academy of General Practice
Assembly Hall, Convention Center

2:00 **To Be Announced**

Kentucky Industrial Medical Association
Room 203, Convention Center

2:00 **"Periodic Physical Examination—Boon or Boondoggle?"**
Gordan W. Richmond, M.D., San Francisco, Calif.

JOHN H. FOSTER, M.D.
Nashville, Tennessee



Professor of Surgery, Vanderbilt University School of Medicine. M.D., 1952, Johns Hopkins University School of Medicine. Associate Director, Clinical Research Center, Vanderbilt University Hospital. Secretary, International Cardiovascular Society. Member, Board of Directors, Middle Tennessee Heart Association. Member, American Association for Thoracic Surgery, American College of Surgeons, American Heart Association, and American Surgical Association. Author and co-author of 144 scientific articles.

HAROLD E. BOYER, D.D.S.
Louisville, Kentucky



Dean, University of Louisville School of Dentistry; Chief, Section of Oral Surgery, Louisville General Hospital; Chief, Section of Oral Surgery and Dentistry, Children's Hospital. D.D.S., 1952, and M.Sc., 1958, University of Pennsylvania. Dental Consultant, Office of Economic Opportunity, Project Head Start. Chairman, Oral Surgery Section, American Association of Dental Schools. Diplomate and member, Board of Directors, American Board of Oral Surgery. Fellow, American College of Dentists and International College of Dentists.

GORDON W. RICHMOND, M.D.
San Francisco, California



Corporate Medical Director, Standard Oil of California. M.D., 1939, Stanford University School of Medicine. Member, Board of Directors, San Francisco Chapter, National Council on Alcoholism. Member, Medical Advisory Committee of the National Agricultural Chemical Association. Member, Industrial Medical Association and Western Industrial Medical Association.

HAROLD T. CONRAD, M.D.
Lexington, Kentucky



Chief, Clinical Research Center, NIMH; Assistant Professor of Psychiatry, University of Kentucky Medical Center. M.D., 1958, University of Chicago School of Medicine. Certified, American Board of Psychiotry and Neurology. Member, American Psychiatric Association and Kentucky Psychiatric Association.

Kentucky Chapter, American College of Physicians
Room 204, Convention Center

2:00 "An Unusual Cause of Jaundice"
Sam H. Traughber, M.D., Hopkinsville

2:30 "Ovarian Vein Thrombophlebitis with Multiple Pulmonary Emboli"
Walter L. Thompson, M.D., Louisville

3:00 Intermission to Visit Exhibits

3:30 "The Drug Treatment of Renal Disease"
Walter M. Kirkendall, M.D., Iowa City, Iowa

4:00 "Peptic Ulcer Disease"
Robert G. Overstreet, M.D., Louisville

Kentucky Society of Pathologists
Room 208, Convention Center

2:00 "The Future Role of the Clinical Pathologist in Small Laboratories"
Irene E. Roeckel, M.D., Lexington

2:30 "Magnesium Metabolism—Laboratory Evaluation"
John G. Batsakis, M.D., Ann Arbor, Mich.

3:00 Intermission to Visit Exhibits

3:30 "Plasma Renin Assays"
Thomas Stoeckinger, Ph.D., Lexington

4:00 "Tissue Typing and Its Application to Medical Practice"
William V. Miller, M.D., Lexington

Kentucky Association of Public Health Physicians
Room 207, Convention Center

2:00 "Drug Abuse"
Harold T. Conrad, M.D., Lexington

3:00 Intermission to Visit Exhibits

3:30 Business Meeting

Kentucky Psychiatric Association
Room 101, Convention Center

2:00 "Methadone Maintenance in Perspective"
Edward Gordon, M.D., White Plains, N.Y.

2:30 Discussion

3:00 Intermission to Visit Exhibits

3:30 "The Evolution of Medical Jurisprudence"
Raymond F. Bossmeyer, J.D., Louisville

4:00 Question and Answer Session

Kentucky Chapter, American College of Surgeons
Room 104, Convention Center

2:00 "Kentucky Hospitals—Physician Representation on Governing Boards"
Sam D. Weakley, M.D., Louisville
E. Truman Mays, M.D., Louisville

2:15 "The Making of Surgeons"
Hiram C. Polk, Jr., M.D., Louisville

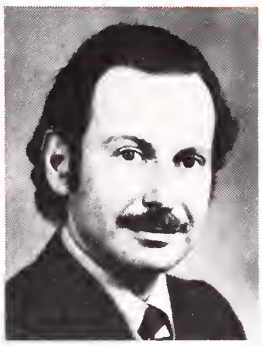
2:30 "Diagnostic Laparotomy for the Staging of Hodgkins Disease"
William R. Meeker, Jr., M.D., Lexington
J. David Richardson, M.D., Lexington
William P. Jewell, M.D., Lexington

3:00 Intermission to Visit Exhibits

3:30 "Expectant Treatment Versus Elective Operation for Abdominal Aortic Aneurysm"
John H. Foster, M.D., Nashville, Tenn.

4:15 Business Meeting

EDWARD GORDON, M.D.
White Plains, New York



Director, Methodone Treatment Program, County of Westchester Community Mental Health Board. M.D., 1960, New York Medical College. Member, Advisory Committee to the Drug Abuse and Dependency Program of the Westchester Mental Health Association. Consultant, Rockefeller University. Member, American Psychiatric Association and Westchester County District Branch, American Psychiatric Association.

Two Famous Texans To Address KMA Annual Meeting

Two famous Texans will travel to Louisville to participate in the 1971 KMA Annual Meeting on Wednesday, September 22.

Michael E. DeBakey, M.D., Houston, will speak on the topic, "Patterns of Atherosclerosis and their Clinical Significance" at 10:50 a.m. The well-known heart surgeon and President of Baylor College of Medicine, will deliver the Griswold Memorial Lecture which, for the first time, is being given in conjunction with the KMA Scientific Program this year. All scientific sessions will be held in Louisville Convention Center.

Story Musgrave, M.D., also of Houston, and the United States' only physician astronaut, will be the featured speaker at the KMA President's Luncheon, to be held in the Flag Room of the Kentucky Hotel, beginning at 11:50 a.m., Wednesday, September 22.

A native of Massachusetts, Doctor Musgrave considers Lexington, Kentucky, his hometown, having lived there from 1964-1967, while in training at the University of Kentucky College of Medicine. He still holds a post as a part-time Instructor in the Department of Physiology and Biophysics at U. of K.

Doctor Musgrave was selected as a scientist-astronaut by NASA in August, 1967. He has since completed the initial academic and flight training and is currently involved in further training for future manned space flights.

MESSAGE CENTER
584-2201

You may be reached through this number at the Convention Center during the KMA Annual Meeting.

1971 Annual Meeting To Feature Ten Scientific Exhibits

Ten interesting and informative scientific exhibits have been approved for showing at the 1971 Annual Meeting, according to Benjamin B. Jackson, M.D., Chairman of the Committee on Scientific Exhibits.

The exhibits will cover a wide range of medical topics and will illustrate recent developments in research, techniques, and medical education.

The exhibit selected as first place winner will receive a plaque from KMA and each participating exhibitor will be awarded a certificate.

Conveniently located for easy access, the exhibits will be placed between the Technical Exhibit area and the Scientific Assembly Hall in Convention Center.

The ten exhibits that have been approved by the Committee, as of July 21, are:

Use of the Internal Jugular Vein for Placement of Central Venous Catheter
William R. Jernigan, M.D.

Nosocomial Electrocution
George F. Brockman, III, M.D.

Barium, Air, and Radioplaque Contrast Medium Examination of the Stomach
T. R. Marshall, M.D.

Professional Education on Retrolental Fibroplasia
Kentucky Society for Prevention of Blindness

Genetic Counseling in Down's Syndrome
Bernard Weisskopf, M.D.
Nuhad Dinno, M.D.

Pearl of the Week
Harold D. Rosenbaum, M.D.

MAKE YOUR RESERVATIONS NOW

It is important that hotel reservations be made as soon as possible for the KMA Annual Meeting, September 21-23. There are hotel and motel accommodations within easy walking distance of Louisville's Convention Center. The Seelbach Hotel will be the Annual Meeting Headquarters Hotel this year. Use the reservation form on page 599 and make your reservations NOW.

Films for Patient Instruction
James W. Bard, M.D.

Continuing Education for Kentucky
Frank R. Lemon, M.D.
E. Scott Donovan, M.D.

PANMED
KMA Educational Television Committee

Glaucoma Screening Booth
Kentucky Society for Prevention of Blindness

U-L Alumni Reunions To Be Held With KMA Annual Meeting

Alumni reunions for 11 classes of the University of Louisville School of Medicine are being planned during the 1971 KMA Anniual Meeting, according to Les Shively of the U. of L. Alumni Office.

Chairmen of five-year classes, starting with 1921, are planning individual functions. The following is a list of the Chairmen selected this year:

1921—J. Duffy Hancock, M.D., 3412 Medical Arts Building, Louisville, 458-2677.

1926—K. Armand Fischer, M.D., 822 Heyburn Building, Louisville, 584-4163.

1931—William K. Keller, M.D., Louisville General Hospital, Louisville, 589-4321, Ext. 236.

1936—George F. McAuliffe, M.D., 2218 Medical Arts Building, Louisville, 454-3656.

1941—Frederick C. Ehrman, M.D., 1204 Heyburn Building, Louisville, 583-2026.

1946—June—Paul J. Ross, M.D., 2334 Medical Arts Building, Louisville, 451-9966.

1946—December—J. Herman Mahaffey, M.D., 816 Medical Towers Building North, Louisville, 587-0781.

1951—A. Lyle Havens, M.D., 207 Sparks Avenue, Jeffersonville, 282-1308.

1956—David S. Nightingale, M.D., 1226 Medical Arts Building, Louisville, 451-0313.

1961—Jay S. Koby, M.D., 2215 Medical Arts Building, Louisville, 459-8913.

1966—Barry S. Stoler, M.D., 6329 Limewood Circle, Louisville, 426-2165.

1971 Annual Meeting To Honor Past-President George Beeler

The 1971 Annual Meeting of KMA will be officially entitled "The George Beeler Memorial Meeting" in remembrance of the 1891 President of the Association.



Doctor Beeler

The tradition of honoring a past president of KMA or some distinguished physician each year at the Annual Meeting was started in 1935.

A biography of Doctor Beeler has been written by KMA Historian, Eugene H. Conner, M.D., Louisville. It will appear in the Annual Meeting program booklet which will be distributed at the Meeting, September 21-23.

President's Luncheon To Feature Astronaut, Award, Installation

An address by Story Musgrave, M.D., U. S. astronaut, the presentation of KMA's three top awards, and the installation of KMA's new President, John S. Harter, M.D., Louisville, are to highlight the President's Luncheon, September 22.

Doctor Musgrave will discuss "United States' Spaceflight Objectives, 1971-2000" at the luncheon, held at 11:50 a.m. in the Flag Room of the Kentucky Hotel. Preceding his address, the Distinguished Service Award, the Outstanding General Practitioner Award, and the Kentucky Medical Association Award will be presented.

A new feature of the luncheon will be the installation of KMA's President. Doctor Harter will be sworn in by Lee C. Hess, M.D., Chairman of the Board of Trustees.

All KMA members and their wives are invited to attend the luncheon.

Dr. DeBakey To Give Griswold Lecture

The Fifth Arnold Griswold Lecture will be given by Michael E. DeBakey, M.D., Houston, Texas, on September 22, during the Annual Meeting.

The Arnold Griswold Lecture in surgery was established in 1966 by the former residents of Doctor Griswold, in appreciation for the years he has devoted to teaching, inspiring, and guiding them. It also recognizes his ability as a surgeon, his contribution to surgical knowledge, and his long, continued contributions to the University of Louisville School of Medicine.

Doctor DeBakey has been a long-time friend of Doctor Griswold and operated on Doctor Griswold several years ago. Doctor DeBakey is known internationally for his work in cardio-vascular surgery.

Visiting lecturers who have participated as the Arnold Griswold lecturers are Doctors Preston Wade, Warren Cole, Carwford J. Campbell, and John Moncrief.

Seelbach Hotel

Is

Headquarters Hotel

For

1971 Annual Meeting

September 21-23

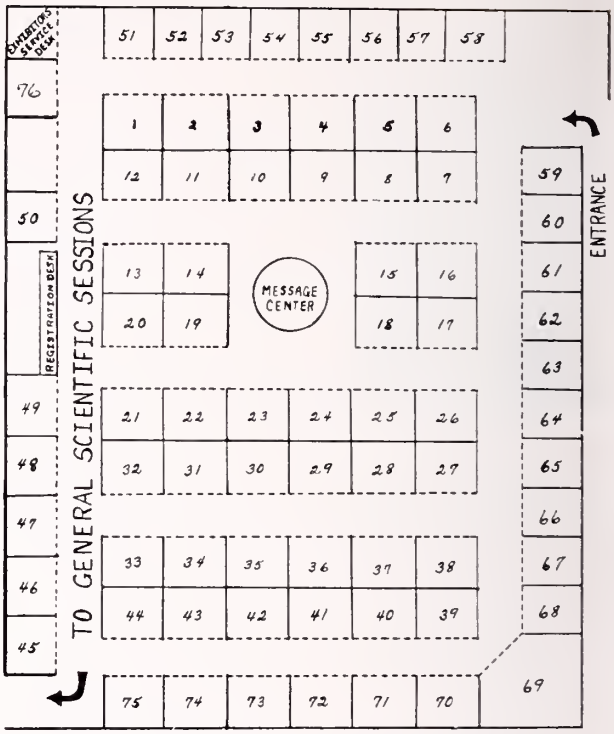
Sixty-five Technical Exhibits To Feature Latest Medical Products and Services

The 1971 KMA Annual Meeting will feature sixty-five technical exhibits in the hall at Convention Center. As you enter the hall, some of the latest developments in medical techniques and information will be displayed for your convenience and enjoyment.

Exhibitors will be available to discuss their products with you and relate their discoveries and innovations. They can also show you the most up-to-date advances in their services.

The exhibits, prepared carefully and skillfully to appeal to you, the physician, have also been prepared to appeal to your special interests. A vast amount of knowledge and information can be secured conviently and effortlessly in a short period of time.

Intermissions of 30 minutes have been scheduled during each general and specialty group session so that every KMA member may take advantage of this excellent opportunity provided by the exhibits.



Floor Plan of Technical Exhibits

TECHNICAL EXHIBITORS

Abbott Laboratories (10)
American Medical Facilities Corporation (32)
Armour Pharmaceutical Company (11)
Arnar-Stone Laboratories, Inc. (76)
Automated Management Systems (36)
Ayerst Laboratories (23)
B. B. C. Health Care Industry, Inc. (38)
Blue Cross & Blue Shield, Kentucky (40)
Borden, Inc., Pharmaceutical Products (22)
Bristol Laboratories (21)
Burroughs Wellcome & Co. (U.S.A.), Inc. (39)
Burton, Parsons & Company, Inc. (75)
Coca-Cola USA (69)
Consolidated Biomedical Labs (48)
Crocker-Fels Company (74)
Dairy Council of Ky. & So. Ind. (64)
Data-Type, Inc. (25)
Dictaphone Corporation (52)
Donnellon McCarthy, Inc. (28)
Doyle Pharmaceutical Company (3)
Eaton Laboratories (45)
Encyclopaedia Britannica, Inc. (61)
Field Enterprises Educational Corporation (65)
General Medical Corporation (18)
Gerber Products Company (71)
Guild of Prescriptions Opticians of Kentucky (8)
John Hancock Life Insurance Company (68)
Lakeside Laboratories, Inc. (19)
Lederle Laboratories (24)
Lee, A. P., Agency (66)
Lilly, Eli, & Company (16)
Lippincott, J. B., Company (5)
Lorillard (27)
Malkin Instrument Company (60)
Medical Protective Company (63)
Merck, Sharp & Dohme (58)
Merrill, Lynch, Pierce, Fenner & Smith, Inc. (55)
Metropolitan Life Insurance Company—Medicare Office (4)
New Albany Office Machines, Inc. (33)
Ortho Pharmaceutical Corporation (14)
Parke, Davis & Company (6)
Pfizer Laboratories (44)
Poythress, William P., & Company, Inc. (50)
Professional Corporation Benefits Company (56)
Ransdell Surgical, Inc. (72)
Reynolds, R. J., Tobacco Company (1)
Robins, A. H., Company (7)
Rorer, William H., Inc. (47)
Ross Laboratories (2)
Sandoz Pharmaceuticals (9)
Saunders, W. B., Company (51)
Scroggins, Clayton L., Associates (49)
Searle, G. D., & Company (26)
Sheryl Pharmaceuticals, Inc. & Glencoe Research, Inc. (73)
Smith, Miller & Patch, Inc. (17)
Squibb, E. R., & Sons, Inc. (43)
Stuart Pharmaceuticals Div. of Atlas Chemical Industries, Inc. (12)
Tele-Business Products Company (54)
3M Business Products Sales, Inc. (62)
United Medical Laboratories, Inc. (59)
USV Pharmaceutical Corporation (15)
Warner-Chilcott Laboratories (20)
Wocher, Max, & Son Company (57)
Wyeth Laboratories (46)
Zimmer Manufacturing Company (67)

ORGANIZATION SECTION

Dr. Charles A. Hoffman Chosen AMA President-Elect

Charles A. Hoffman, M.D., a Huntington, W. Virginia urologist, was chosen President-Elect of the American Medical Association at the June 20-24 Annual Convention held in Atlantic City. Wesley W. Hall, M.D., Reno, Nevada, was installed as AMA's President during the meeting.



Doctor Hoffman

A native of Ironton, Ohio, Doctor Hoffman received a Degree in Pharmacy from Ohio State University in 1925 and a Medical Degree from the University of Cincinnati in 1935. He is certified by the American Board of Urology and the International Board of Urology.

Doctor Hoffman has been active in organized medicine at the local, state, and national levels. He is a Past-President of the Cabell County Medical Society and was President of the West Virginia State Medical Association from 1957 to 1958.

A Delegate from West Virginia to the AMA from 1958 until his election to the AMA Board of Trustees in 1969, Doctor Hoffman was chosen Secretary-Treasurer of the Association in 1970. He was Vice-Chairman of the AMA Council on Medical Service and Chairman of the AMA Committee on Health Care Financing.

Doctor Hoffman was President of the American Urological Association from 1967 to 1968 and President of the American Association of Clinical Urologists from 1968 to 1970. He is a Fellow of both the American College of Surgeons and the International College of Surgeons.

Doctor Hoffman is a federal appointee to the Advisory Committee of the Appalachian Regional Commission and a member of the President's Conference on Medicare, the President's Committee on Professional Liability, the National Commission on Venereal Disease, and the Panel on Incentive Reimbursement for Hospital Costs under Medicare. Doctor Hoffman was also a member of Task Force V, an Advisory Committee to the Social Security Administration on Specialists Services under Medicare.

Others elected or re-elected to Association positions are: Vice-President, Ralph C. Teall, M.D., California; Speaker of the House, Russell B. Roth, M.D., Pennsylvania; Vice-Speaker of the House, J. Frank Walker, M.D., Georgia; Trustees, John M. Chenault, M.D., Alabama, Raymond T. Holden, M.D., Washington, D.C., John R. Kernodle, M.D., North Carolina, Donald E. Wood, M.D., Indiana, Robert B. Hunter, M.D., Washington, and Jere W. Annis, M.D., Florida.

AMA Considers 158 Items, Hears President Nixon

Delegates to the 120th Annual Convention of the American Medical Association held in Atlantic City, June 20-24, acted on 158 items of business.

Meeting for a total of 13 hours and 53 minutes, the House acted on six special reports, 31 reports from the Board of Trustees, two reports from the Council on Constitution and Bylaws, four from the Council on Medical Education, eight from the Council on Medical Service, two from the Judicial Council, one from the Council on Long Range Planning and Development, and 104 resolutions.

The House of Delegates heard a speech by the President of the United States, Richard M. Nixon. The President discussed the current debate on national health insurance, the curing and preventing of drug abuse, and the need for physicians to be more active in politics and community leadership.

Walter C. Bornemeier, M.D., outgoing President of AMA, gave his final report to the House. The report, entitled "Blueprint for the Future," pointed out that of the three principle ingredients of medical care—cost, quality, and availability—"availability is on the front burner. People are more concerned about getting medical care when they need it," he said, "than they are about its cost or its quality."

Wesley W. Hall, M.D., incoming President of AMA, gave his inaugural address to the group. Doctor Hall traced the growth of medicine to the present time and then detailed some of the profession's more pressing problems of today, including the state of medical education, the need for more manpower, care for the poor, and rural health.

Items acted on by the House included changes in the organization, a reiteration of the AMA policy regarding the right of access to medical care, recommendations for the medical profession regarding alcoholism and drug abuse, reaffirmation of AMA support of voluntary mechanisms of review and education by physicians, better health and patient care, and medical societies' support to house officers and medical students.

KMA's Delegates to AMA Active At Atlantic City Meeting

J. Thomas Giannini, M.D., Louisville, Senior Delegate to AMA from the Kentucky Medical Association, served as Chairman of Reference Committee A at the recent AMA Annual Meeting held June 20-24 in Atlantic City.

Reference Committee A dealt with such vital subjects as the evaluation of the primary physician's assistant, guidelines for community health programs, peer review, health maintenance organizations, foundations for medical care, and Medicare and Medicaid regulations.

KMA was also honored to have Charles C. Rutledge, M.D., Hazard, serving on Reference Committee F of the AMA House of Delegates.

Lock-In Project Evaluated By Title XIX Committee

There has been considerable interest on the part of the KMA membership in regard to the Kentucky Medical Assistance Program's experimental "Lock-in" Project, which presently involves 36 recipients in a ten-county area.

Evaluation after five months shows the following statistics for these recipients:

	BEFORE LOCK-IN	AFTER LOCK-IN
Average Rx./mo.	19.4	6.3
Average Office Visits/mo.	5	4
Average expense per over-utilizing recipient/mo.	$91.56	$46.51
Average program expenditure/mo.	$15.89	$16.01
Average monthly pharmacy services savings		$1,369.80
Average monthly physician services savings		$ 252.00

According to Donald Chatham, M.D., Chairman of the Technical Advisory Committee on Physician Services (Title XIX), it is planned that this particular project will be continued for an additional six months. The program will be based on the same criteria and guidelines as originally approved, whereby the patient has monthly freedom of choice in the selection of a physician and a pharmacy.

The Title XIX Committee members have suggested that it be emphasized to the practicing physicians that if they have over-utilizing Medicaid patients, this be reported to the Kentucky Medical Assistance Program. Such reporting could result in a savings which could be better used in improved payments for physicians' services.



S. Randolph Scheen, M.D., Louisville, Secretary of KMA, is shown at left above presenting a plaque to William W. Hall, M.D., Owensboro, Immediate Past Chairman of the Board of Trustees. The plaque, presented on behalf of the Board, is in recognition of Doctor Hall's outstanding service to KMA during his tenure on the Board of Trustees.

PANMED Films To Be Rerun Beginning August 23

The medicine segment of the PANMED series shown during this past year will be rerun for four consecutive weeks, beginning August 23 on KET. The programs can be seen at 10:30 p.m. EST (9:30 p.m. CST).

"The Anemic Patient" will be rerun on August 23. The other three programs scheduled are: "Advances in the Treatment of Malignant Disease," August 30; "Spirometry: Early Detection of Chronic Obstructive Pulmonary Disease," September 6; and "The Transient Ischemic Attack," September 13.

Check your local newspaper for the TV station in your area that will carry the PANMED programs.

Dr. Witten Named to AMA Post

Carroll L. Witten, M.D., President of the Louisville Board of Aldermen and a KMA member, was re-elected without opposition to the Council on Constitution and Bylaws during the recent AMA Meeting in Atlantic City. He was re-elected to a five-year term by the Association's House of Delegates.

PR Workshops Scheduled For Aug. And Sept.

The Claims and Utilization Review Committee, chaired by Marvin A. Bowers, Jr., M.D., Louisville, has announced that a series of four workshops for the Trustee District Peer Review Committee members will be held in Louisville during the months of August and September.

The meetings, which will take place at the Ramada Inn on Hurstbourne Lane, will be held on the following dates: August 19 and 26, September 2 and 9.

These meetings will start at 9:30 a.m., and will adjourn at approximately 4:30 p.m., following a full-day session. The morning program will be taken up primarily with discussions by representatives of Kentucky Physicians Mutual, The Health Insurance Council, The Kentucky Medical Assistance Program (Title XIX), and Title XVIII Programs (Medicare).

Following the morning session, Doctor Bowers will set forth the goals and duties of the Trustee District Peer Review Committee. Within this discussion, an attempt will be made to set forth the activities of the peer review groups at the trustee level and to give all Committee members a sound background for performance of this very important function.

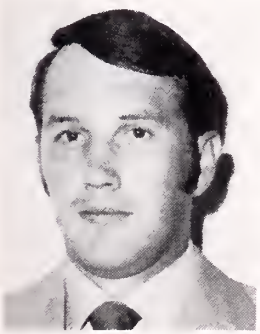
The afternoon will be taken up with workshops, with every group having cases to review, discuss, and make decisions upon based on the information presented.

Notices have been sent to the Trustee District Committees urging the members of those Committees to make every attempt possible to be present for the workshops.

This program is a part of the work being done in the field of peer review with grant money which was recently received by the Kentucky Medical Association from Comprehensive Health Planning.

Robert Klinglesmith Joins KMA Staff

Robert E. Klinglesmith, a 25 year old native of Jefferson County, joined the KMA staff on July 1 as Coordinator of Claims and Utilization Review activities. In this newly established position, made possible by a grant from the Comprehensive Health Planning Council of Kentucky, he will be responsible for all staff activities in the review field.



Mr. Klinglesmith

Working under the direction of the KMA Executive Director and the Chairman of the Claims and Utilization Review Committee, Mr. Klinglesmith will have prime responsibility for setting up the mechanism for complete peer review within the scope of the Kentucky Medical Association.

A 1967 graduate of Kentucky Southern College, Mr. Klinglesmith completed three years of Army service in 1971. He is married, has one child, and resides in Louisville.

KMA Members Are Urged To Vote In Election

An important election is coming up in Kentucky. On November 2, voters will be electing a new Governor, filling all other statewide elective posts, and will be called upon in their respective districts to elect members to all 100 seats of the Kentucky House of Representatives and 19 seats in the State Senate.

To be eligible to vote, you must be registered prior to September 7 and fulfill residency requirements by being a resident of Kentucky for one year, your respective county for six months, and your voting precinct for 60 days.

Be sure to urge your family, friends, and office staff to **register** and **vote** in this election, which will have a vital effect on Kentucky's future.

Cardiology Program Planned

The American College of Cardiology, in cooperation with the University of Kentucky College of Medicine and the Indiana University School of Medicine, will co-sponsor a continuing education program entitled "Abnormal EKG in the Absence of Heart Disease" on September 16-17. To be held at the University of Kentucky Medical Center, the program is under the direction of Borys Surawicz, M.D., Lexington.

OB-GYN

Excellent opportunity for qualified Obstetrician-Gynecologist. Office space, equipment, staff, and excellent financial arrangements. Unlimited potential. Call Administrator, (304) 675-4340, "collect."

Eight Ky. Physicians Granted ACP Fellowships

Eight Kentucky physicians have recently been granted Fellowship in the American College of Physicians, announced Hugh R. Butt, M.D., Rochester, Minn., President of the College.

Granted Fellowships were: Stephen G. Edelstein, M.D., Dorothy R. Hollingsworth, M.D., Stephen C. Schindler, M.D., and Robert R. Siegel, M.D., of Lexington; and James E. Bryan, M.D., Charles E. Dobbs, M.D., Giovanni Raccuglia, M.D., and Donald T. Varga, M.D., of Louisville.

The new Fellows have earned this distinction, according to Doctor Butt, through certification by their specialty boards, presentation of published material, and evidence of scientific accomplishments and academic or hospital affiliations.

Six other Kentucky physicians granted the Fellowship were named in the July *Journal.*

Preventive Medicine Defined

The Board of Regents of the American College of Preventive Medicine, meeting in Atlantic City, June 20, adopted an official definition of the term "Preventive Medicine":

"Preventive Medicine is that branch of medicine which has primary interest in preventing physical, mental, and emotional disease and injury in contrast to treating the sick and injured. Secondarily, it is concerned with slowing the progress of disease and conserving maximal function."

Complete Details

of

1971 ANNUAL MEETING

on

Pages 603-626

SCIENTIFIC PROGRAM

on

Pages 618-623

ABFP Examination Announced For April, 1972

The American Board of Family Practice announces that it will give its next examination for certification in various centers throughout the United States. The examination will be over a two-day period on April 29-30, 1972.

Information regarding the examination can be obtained by writing: Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Kentucky 40506.

Please Note: Deadline for receiving completed applications in the Board office is **February 1, 1972.**

Irvine F. Kanner, M.D., Director of Ambulatory Services, University of Kentucky Medical Center, announces the appointment of **Ronald D. Hamilton,** M.D., as Assistant Director of the Medical Clinic and Ambulatory Services.

James A. Zalla, M.D., is practicing in Florence. A dermatologist, Doctor Zalla is a graduate of the University of Louisville School of Medicine. He interned at St. Elizabeth Hospital, Dayton, Ohio, and served his residency at the Mayo Clinic.

Taste!

Dicarbosil®
ANTACID

Your ulcer patients and others will love it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

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KMA Placement Service Available for Physician Use

The KMA Physician Placement Service is eager to be of assistance to physicians seeking associates and to those physicians desiring to locate in Kentucky.

The KMA Placement Service compiles a quarterly report entitled "Physicians Seeking Locations" which is available to any physician upon request. Names on this list include scholarship recipients, recent medical school graduates, physicians discharged from military service, and doctors who have inquired at KMA about available locations in Kentucky. "Opportunities for Practice," a semi-annual report, is also available upon request to those wishing to practice in Kentucky. Physicians are encouraged to make use of this service.

PHYSICIANS DESIRING ASSOCIATES OR REPLACEMENTS IN SPECIALTY AREAS

County	City	County	City
		ANESTHESIOLOGY	
Barren	Glasgow	Muhlenberg	Greenville
Daviess	Owensboro	Rowan	Marehead
		CARDIOLOGY	
Callowoy	Murray	Harlan	Harlan
		ENT (OTOLARYNGOLOGY)	
Barren	Glasgow	Harlan	Horlan
Daviess	Owensboro	Hopkins	Modisonville
Christion	Hopkinsville	Muhlenberg	Greenville
Hardin	Elizabethtown	Worren	Bawling Green
		DERMATOLOGY	
Doviess	Owensboro	Hopkins	Madisonville
Warren	Bowling Green		
		INTERNAL MEDICINE	
Borren	Glasgow	Hopkins	Madisonville
Christian	Hapkinsville	Mason	Maysville
Daviess	Owensboro	Madison	Richmond
Graves	Mayfield	Muhlenberg	Greenville
Hardin	Elizabethtown	Nelson	Bardstown
Harlan	Harlon	Pike	Pikeville
Henderson	Henderson	Pulaski	Somerset
Laurel	Londan	Warren	Bowling Green
Lowrence	Louisa		
		NEUROLOGY	
Hapkins	Modisonville		
		NEUROSURGERY	
Hopkins	Madisonville		
		OB-GYN	
Daviess	Owensbaro	Madison	Berea
Hordin	Elizabethtown	Mason	Maysville
Harlan	Harlan	Muhlenberg	Greenville
Letcher	Whitesburg	Nelson	Bardstown
Graves	Mayfield	Rowan	Marehead
Marshall	Benton		
		OPHTHALMOLOGY	
Daviess	Owensboro	Worren	Bawling Green
Hardin	Elizobethtawn		
		ORTHOPEDIC SURGERY	
Christion	Hapkinsville	Muhlenberg	Greenville
Hopkins	Madisonville	Pike	Pikeville
Henderson	Henderson	Warren	Bowling Green
		PEDIATRICS	
Bell	Middlesboro	Letcher	Whitesburg
Doviess	Owensboro	Moson	Maysville
Horlan	Harlan	Muhlenberg	Greenville
Laurel	Landon	Nelson	Bardstown
Pike	Pikeville		
		PATHOLOGY	
Hopkins	Madisonville		

(Continued on Next Page)

NEWS ITEMS

Richard K. Bachman, M.D., a pediatrician, is now associated with the Trover Clinic. Doctor Bachman is a graduate of the University of Louisville School of Medicine; he interned and served his residency at Louisville General Hospital.

Harry L. Bailey, M.D., has joined Kearnes R. Thompson, Jr., M.D., and Carl M. Friesen, M.D., in practice in Lexington. Doctor Bailey graduated from the Vanderbilt University School of Medicine, interned at Vanderbilt Medical Center, and served his residency at Duke Medical Center.

Thomas F. Coats, M.D., a specialist in plastic and reconstructive surgery and surgery of the hand, has begun practice in Lexington. A graduate of the Columbia University College of Physicians and Surgeons, Doctor Coats interned at Roosevelt Hospital in New York City. He has served residencies in general surgery and hand surgery at Roosevelt Hospital and plastic surgery at the Columbia-Presbyterian Medical Center in New York City.

Stanley J. Cyran, M.D., recently became the medical director for the General Electric Company in Louisville. A specialist in internal medicine and occupational medicine, Doctor Cyran is a graduate of the State University of New York at Buffalo School of Medicine. He interned at E. G. Meyer Memorial Hospital and served his residency at Sister of Charity Hospital in Buffalo, N. Y.

Ingrid M. Daoud, M.D., has joined the faculty of the University of Kentucky Medical Center. A specialist in pediatrics, Doctor Daoud graduated from the University of Heidelburg in Germany, and interned at Good Samaritan Hospital in Cincinnati. She served her residency at the University of Kentucky Medical Center.

Rodger B. Haglund, M.D., a pathologist, is now practicing in association with the Trover Clinic in Madisonville. Recently discharged from the U. S. Army, Doctor Haglund graduated from Temple University School of Medicine, interned at Ireland Army Hospital, and served his residency at Walter Reed Army Hospital.

David L. McCarty, M.D., is now practicing orthopedic surgery in association with Norwood K. Ford, Jr., M.D., in Louisville. Doctor McCarty is a graduate of the University of Illinois College of Medicine; he interned at Fresno County Hospital and served his residency at Northwestern University.

James H. Stuteville, M.D., is now associated with the Hardin County Health Department in Elizabethtown. A specialist in preventive medicine and aerospace medicine, Doctor Stuteville was on active duty with the U. S. Air Force for 24 years. He graduated from the University of Louisville School of Medicine, interned at Brooke Army Medical Center, and served his residency at the USAF School of Aviation (Aerospace) Medicine.

KMA Placement Service

(Continued from Page 631)

County	City	County	City
		PSYCHIATRY	
Hopkins	Madisonville	Jefferson	Louisville
Rowon	Morehead		
		RADIOLOGY	
Borren	Glasgow	Muhlenberg	Greenville
Warren	Bowling Green		
		SURGERY	
Henderson	Henderson	Muhlenberg	Greenville
Madison	Bereo	Pendletan	Falmouth
Madison	Richmond	Rowan	Morehead
Mason	Moysville		
		UROLOGY	
Calloway	Murray	Mason	Maysville
Henderson	Henderson	Muhlenberg	Greenville



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.



Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*


You can't
treat one
without
the other.

A triumph over trichomoniasis

The male urogenital tract is by far the main source of reinfection in trichomonal vaginitis.

It follows that neglecting to treat infected male partners of women with trichomonal vaginitis invites therapeutic failure.

Just as Flagyl is the best agent available for eradicating trichomonal infection from extravaginal sites in women, it is the only agent capable of eradicating demonstrated trichomonal infection in men.

Because of published reports of consistently high cure rates—often up to 100 percent—and a relatively low incidence of side effects, Flagyl has become the agent of choice for trichomonal vaginitis.

Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture.

Contraindications: Evidence of or a history of blood dyscrasia, active organic disease of the central nervous system and the first trimester of pregnancy.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

Dosage Forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

References available on request.

Flagyl®
metronidazole

care for the pair in trichomoniasis

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G. D. Searle & Co., P.O. Box 5110, Chicago, Illinois 60680
Research in the Service of Medicine

Thorazine®

brand of chlorpromazine

versatility
quality
experience



Smith Kline & French Laboratories SK&F

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U S PATENT NO 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

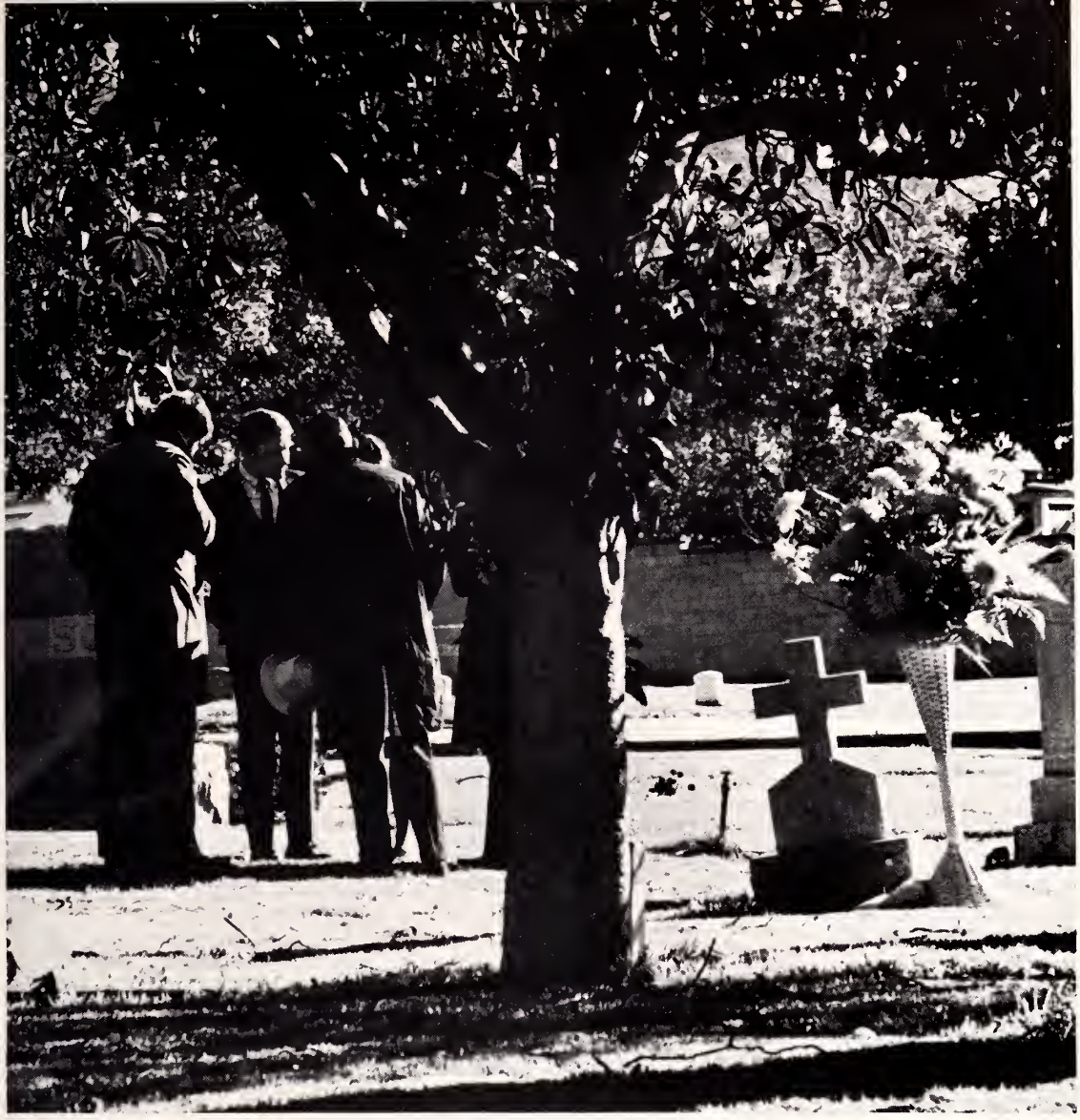
One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Infarmation—Campasitian: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indicatians:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindicatians:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautians/Adverse Reactians:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps



Drunk drivers bring families together.

In hospital rooms and at funerals.

Because that's where the drunk driver's victims wind up. Drunk drivers are involved in at least 25,000 deaths and 800,000 crashes every year.

And what can you do?

Remember, the drunk driver, the abusive drinker, the problem drinker may be sick and need your help.

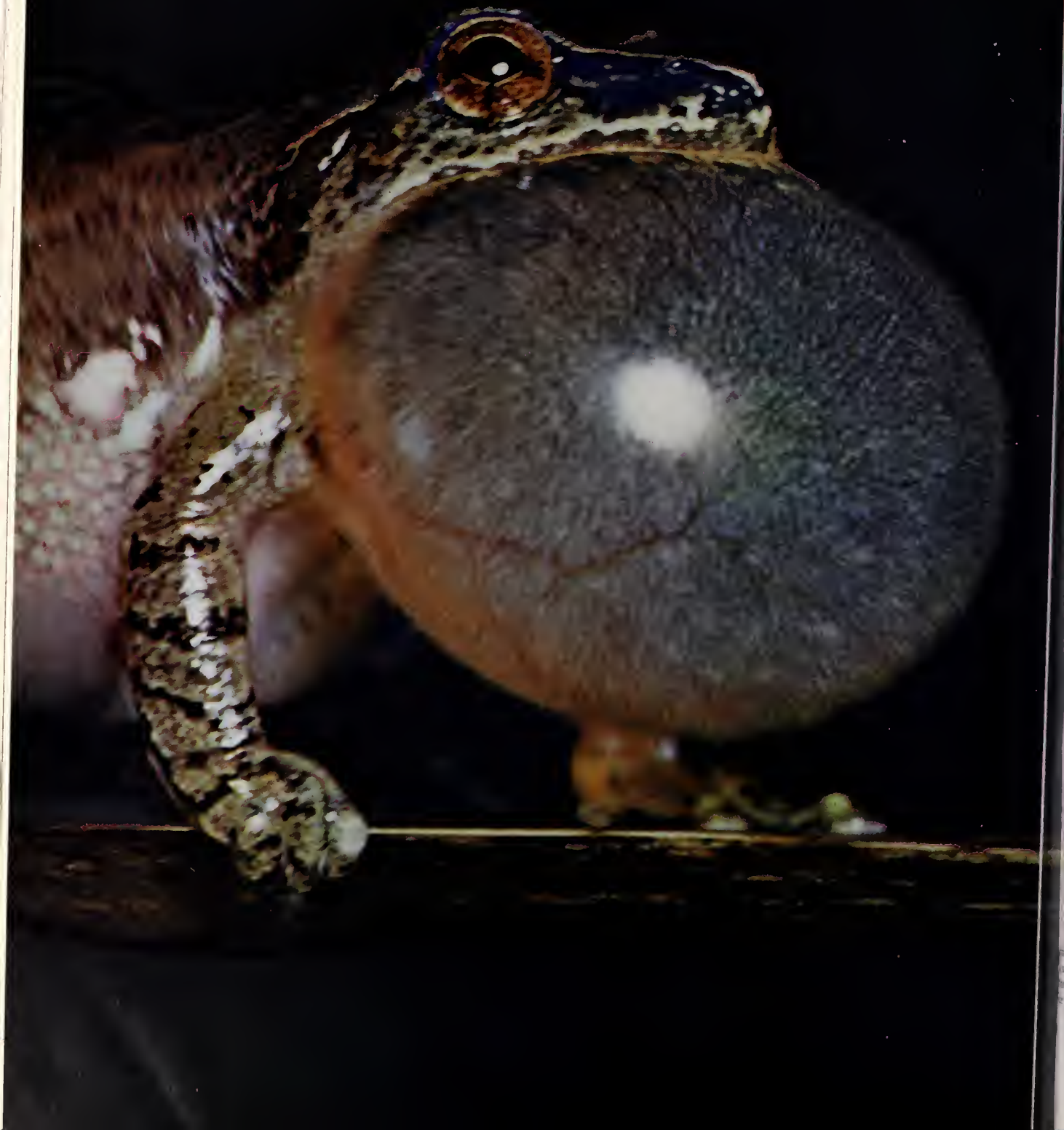
The first thing you can do is get him off the road. For his sake and yours.

Do something. Write the National Safety Council, Dept. A, 425 North Michigan Ave., Chicago, Illinois, 60611. And your voice will be heard.

Scream Bloody Murder.

Advertising contributed for the public good.

When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

THIS SPACE CONTRIBUTED BY THE PUBLISHER AS A PUBLIC SERVICE

the quality of survival

With the steady improvement in the therapy of cancer, and consequent increase in the number of 5-year survivals, our programs reflect increasing concern with the future of the cancer patient—with the *quality* of his survival.

High priority is being given to the rehabilitation of cancer patients—those having had mastectomies, colostomies, laryngectomies, amputations, and other drastic treatments for cancer.

Our "Reach to Recovery" program is a dramatic example. This program helps the physician meet many special needs of the postmastectomy patient on the road to total recovery. Patients receive psychological reassurance and practical help from women who have had the same surgery.

The laryngectomee also receives the benefit of our rehabilitation program. Supported by the Society, the International Association of Laryngectomees, through its local IAL clubs, provides such services as individual and group speech therapy, psychological counseling, visits to new patients, safety training, public education and social activities.

Our rehabilitation programs not only give heart and help to patients but provide the physician with vital aids necessary to improve the *quality* of survival.

American Cancer Society



IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

Nothing new about Synirin other than ...it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

Synirin®

ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

ETHICAL ANALGESIA (economical if prescribed in 100 units with privilege of refills)

PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

° EACH UNCOATED TABLET CONTAINS:

Aspirin 325 mg. (5 gr.)
Pentobarbital* 8 mg. (1/8 gr.)
*May be habit forming.

Federal law prohibits dispensing without prescription

DISPENSED IN BOTTLES OF 100 AND 1000 TABLETS

WILLIAM P. POYTHRESS & COMPANY, INC.
RICHMOND, VIRGINIA 23261
Manufacturers of Ethical Pharmaceuticals Since 1856

A clinical supply of this new aspirin formulation may be requested.

The causes of vaginitis are multiple



Trichomonads... monilia... bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (ominacrine hydrochloride 0.2%, sulfonilomide 15.0%, ollantoin 2.0%)

Suppositories (ominocrine hydrochloride 0.014 Gm., sulfonilomide 1.05 Gm., ollontoin 0.14 Gm.)

Contraindicatians: Known sensitivity to sulfonomides.
Precautians/Adverse Reactians: The usual precautions for topical and systemic sulfonomides should be observed becouse of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria or other manifestotions of sulfonomide toxicity ore reosons to discontinue treatment.
Dosage: One opplicatorful or one suppository Intravoginolly once or twice doily.
Supplied: Creom – Faur-aunce tube with or without applicator. Suppositorles – Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

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PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular

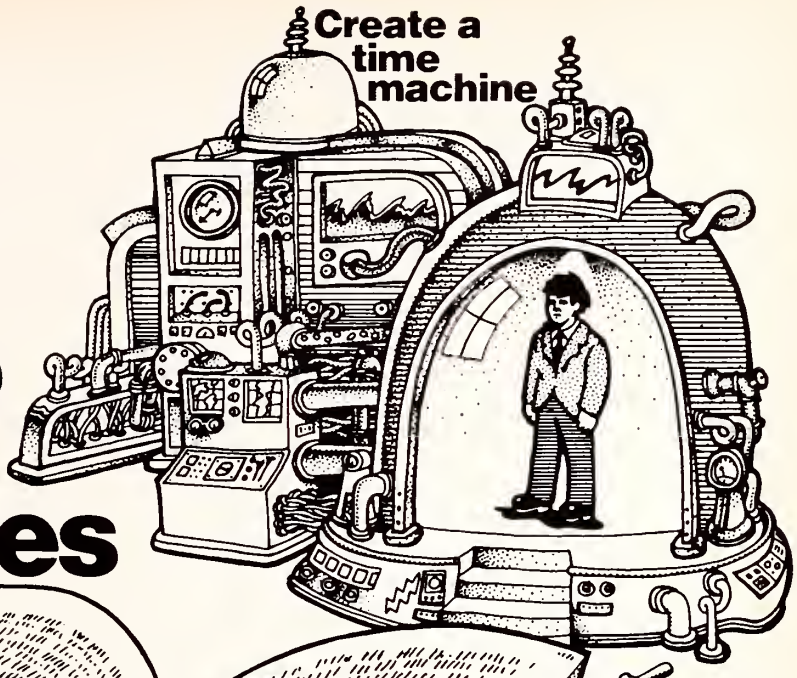


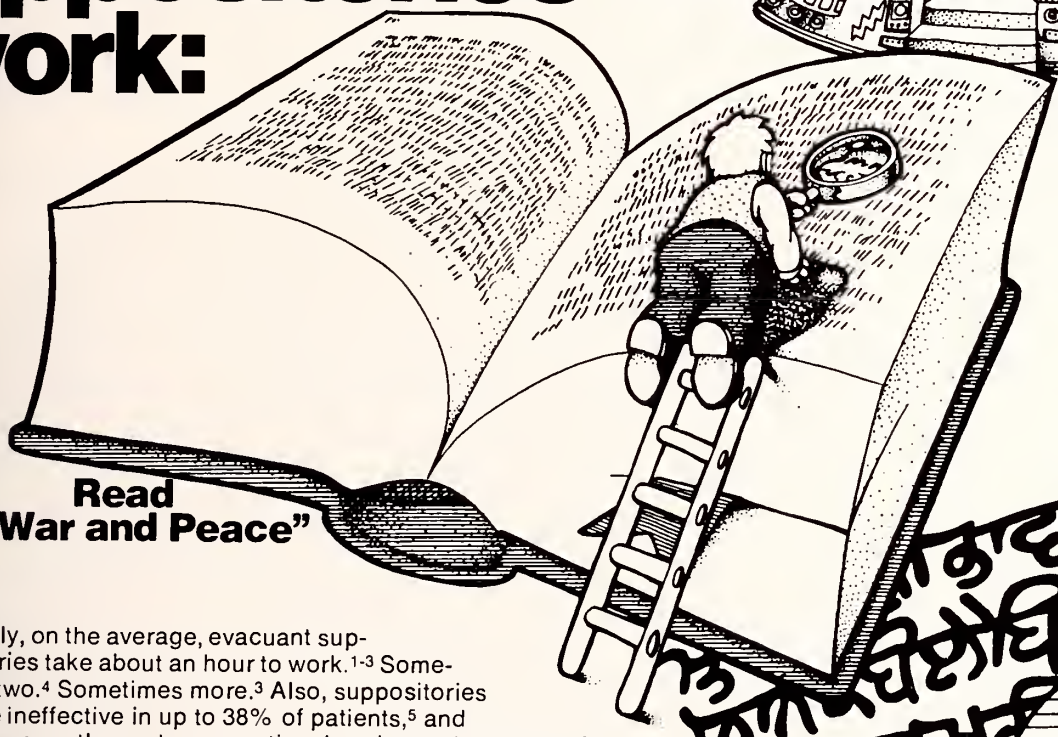
A
BUILDING BLOCK
TO RECOVERY

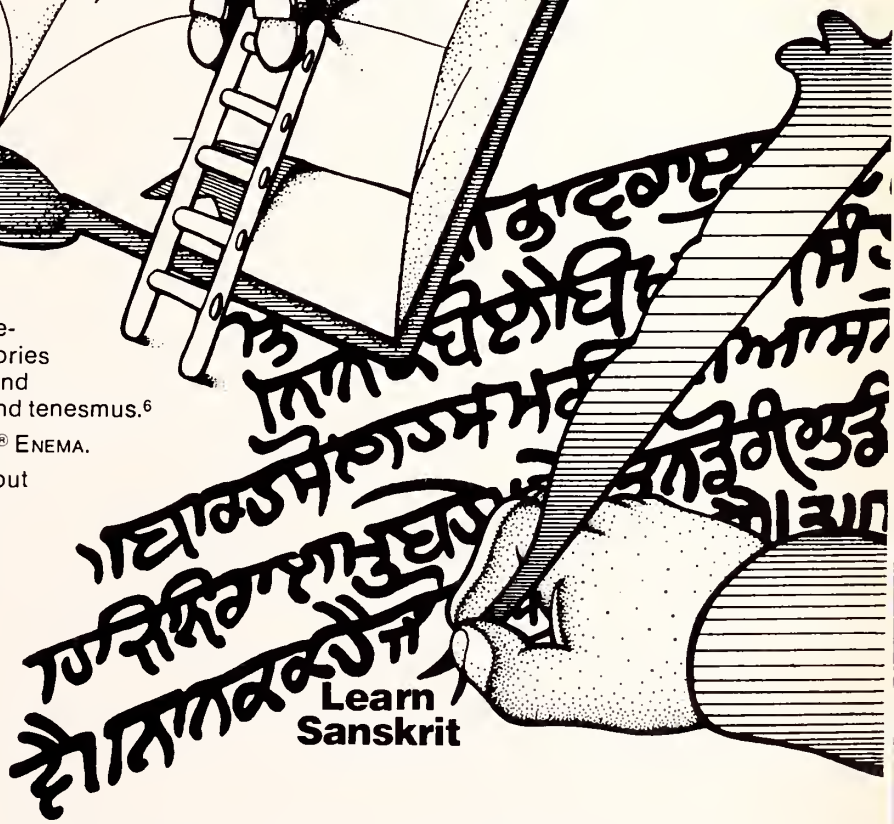
Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

What to do until suppositories work:







Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.

FLEET ENEMA. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.



C. B. FLEET CO., INC.
Lynchburg, Va. 24505

Fleet pharmaceuticals

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present. **Caution:** Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

Call it what you will, it may be premalignant.

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

...and Efudex® (fluorouracil) 5% cream can resolve it.

Call it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,[3,4] offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these mutliple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.[5] Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.[6]

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.[5] The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.[6]

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, Grune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T., and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis, 6*:293, 1970. 4. Sams, W. M.: *Arch. Derm., 97*:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Klein, E.: *Cancer, 25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

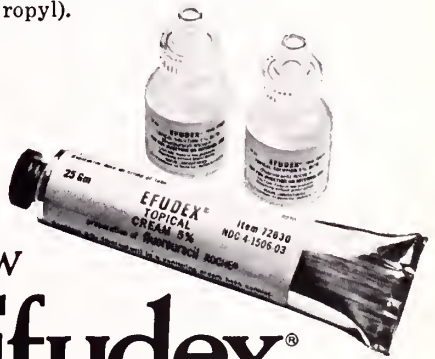
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



now **Efudex®** (fluorouracil) cream/solution

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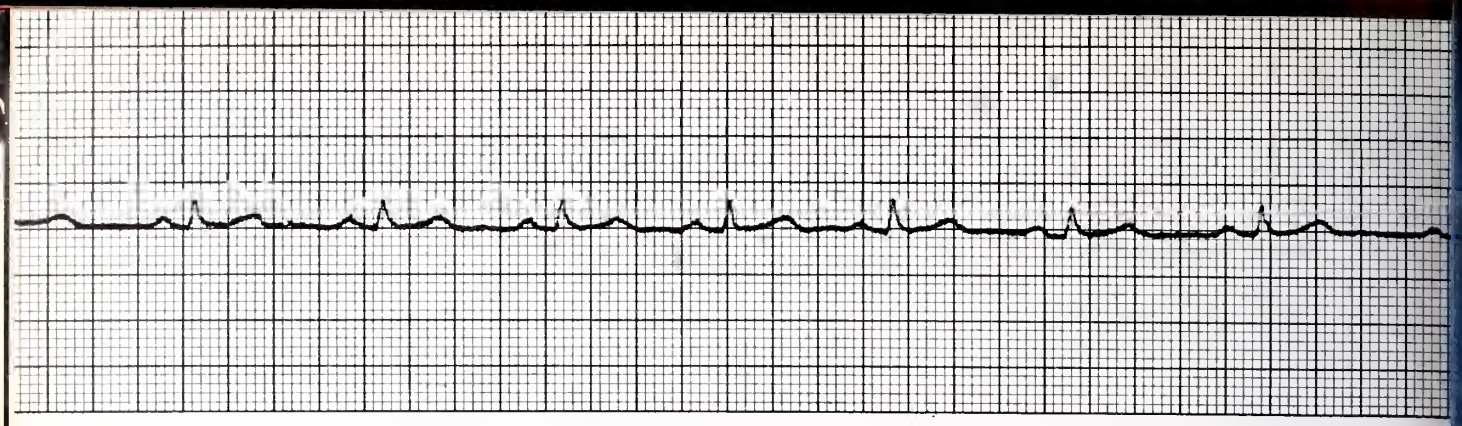
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It is indeed a pleasure and a privilege to host such a distinguished group . . . may your stay be both a pleasant and productive one in

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When disease is ruled out and psychic tension is implicated

Valium® (diazepam) 2-mg, 5-mg, 10-mg tablets

helps relax the patient and relieve his somatic symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose™ packages of 1000.

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VOLUME 69 SEPTEMBER 1971 NUMBER 9

The Journal of The KENTUCKY Medical Association



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KMA 1971 Annual Meeting
September 21-23
Convention Center, Louisville

Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

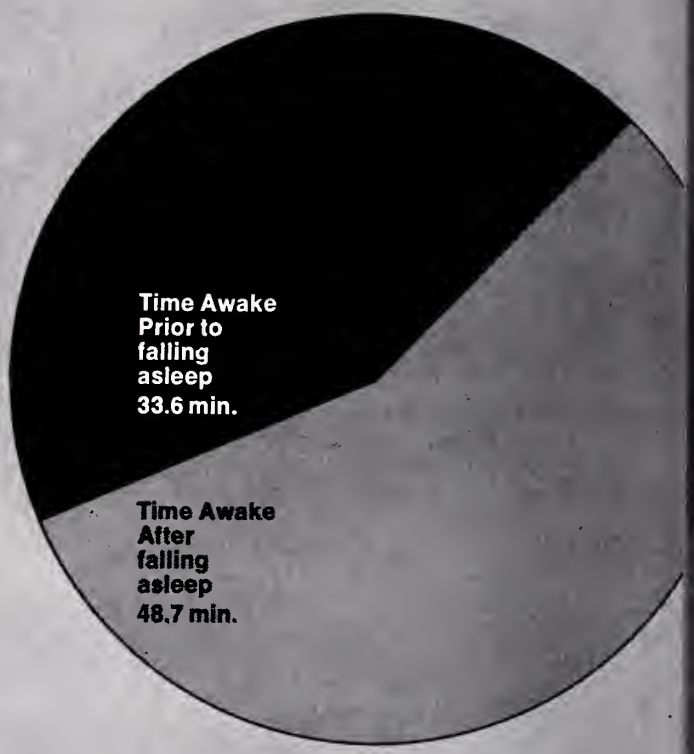
These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electro-encephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

Before Dalmane (flurazepam HCl)

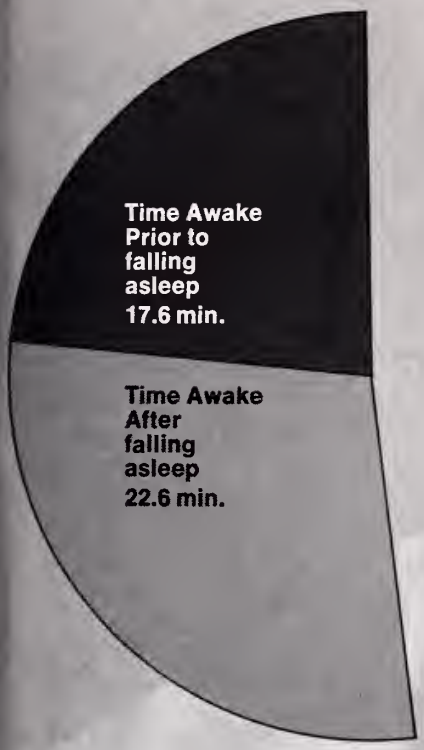


Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

and slept through the night

On
Dalmane
(flurazepam HCl)

MDS



erage sleep laboratory measurements in cited studies

rameter	Before Dalmane	On Dalmane
ne required to fall asleep	33.6 min.	17.6 min.
ake time after onset of sleep	48.7 min.	22.6 min.
mber of wakeful periods after onset of sleep	12.2	8.4
tal sleep time	420.0 min.	447.5 min.
tal sleep percent	88.6	94.5

linical effectiveness as roven in the sleep laboratory

Dalmane®
flurazepam HCl)

e 30-mg capsule h.s.—usual adult dosage.
e 15-mg capsule h.s.—initial dosage for derly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Long-acting Hygroton offers a gentle flow rather than abrupt diuresis.
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Electrolyte imbalance may occur when using diuretics. Hygroton is contraindicated in severe renal or hepatic diseases and, of course, if it causes hypersensitivity. Carefully supervise those who may be receiving other antihypertensives.

Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

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MESSAGE FROM THE PRESIDENT



"Mod" Medicine

ONE wonders how life may have been when an entire life span could have been spent according to the precepts one learned in his youth—where the most momentous change may have been the invention of a rubber tire for the family buggy or a screen door to keep the flies out. Most ideologies, for the average man, were more or less static and dependable.

The changes during my 33 years of involvement in medical pursuits have been such as to create a mild state of vertigo, but my attitude has been much like that of a friend who is wont to say on occasion, "I don't want to go, but don't leave without me."

During these 33 years, the Sulfonamides came into common usage, then the era of Penicillin, the hypotensives, the beautiful propanolol, the corticosteroids, etc. These came, plus discoveries concerning practical uses of the enzymes and the fantastic possibility of manipulating the genes, as well as advances in surgery—including daring heart transplantation in spite of insufficient knowledge of immunology and the necessity of the removal of a beating heart from the donor. "Quel savoire faire."

Certainly it is no wonder that it is necessary for many of us, as we grow older, to limit our scope to our areas of special academic interest or skills, since it would be almost impossible for those of us with busy practices to keep abreast.

As if this were not enough for my generation to cope with, ominous clouds of government take-over of the profession loom; and it seems that the pattern of delivery of medical care by the coming generations will be determined by Congress and, worse, arbitrary regulations by various echelons of HEW sub-bureaucrats and their computers. It seems that the best any of us can do is to become involved to the extent that we can help insure that whatever evolves will be less than disastrous to the country and to the profession.

As I implied above, much of this trip has been one I didn't want to make, but I'm glad you let me go along. Much as I felt about going overseas during World War II—if it's going to happen, I want to be there when it happens.

Thanks for your confidence, your many kindnesses and generosity. This year as your President has been rewarding and educational, to say the least. There is much still to be done, so if you think I can be of any further help—don't leave without me.



Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

SEPTEMBER

13 PANMED television series, "The Transient Ischemic Attack," KET 10:30 p.m. EST (9:30 p.m. CST)

16-17 Postgraduate course, "Abnormal EKG in the Absence of Heart Disease," American College of Cardiology, University of Kentucky College of Medicine, Indiana University School of Medicine, Krannert Institute of Cardiology, and Kentucky Heart Association, University of Kentucky Medical Center, Lexington

21-23 Annual Meeting, Kentucky Medical Association, Seelbach Hotel and Convention Center, Louisville

OCTOBER

8-9 Kentucky and Tennessee Regional Meeting of the American College of Physicians and the Kentucky and Tennessee Societies of Internal Medicine, Louisville Stouffer's Inn

NOVEMBER

4-5 Fifth Annual Newborn Symposium, "Hematological Problems in the Newborn," Department of Pediatrics, University of Louisville. For further information write: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, 226 East Chestnut Street, Louisville, Kentucky 40202

IN SURROUNDING STATES

SEPTEMBER

23 Seminar on "Diabetes and Pregnancy," Department of Continuing Education, Good Samaritan Hospital, Ohio Valley Regional Medical Program, and CONMED, Good Samaritan Hospital Auditorium, Cincinnati, Ohio

OCTOBER

4-7 Annual Scientific Assembly of the Academy of General Practice, Convention Hall, Miami Beach, Florida

4-9 Postgraduate course, "Laryngology and Bronchoesophagology," Department of Otolaryngology, University of Illinois Medical Center, held at University of Illinois Hospital Eye and Ear Infirmary, Chicago, Ill.

6-7 Postgraduate course, "Psychiatric Aspects of Medical Practice for the General Physician," Cleveland Clinic Educational Foundation, Cleveland, Ohio

8-9 Postgraduate course, "Otolaryngology for the Family Physician," Department of Otolaryngology, University of Miami School of Medicine, Miami, Florida

16-21 Fortieth Annual Meeting, American Academy of Pediatrics, Chicago, Ill.

18-22 Fifty-seventh Annual Clinical Congress, American College of Surgeons, Atlantic City, New Jersey

24-28 Third Annual Fall Scientific Assembly (37th Annual Meeting), American College of Chest Physicians, Philadelphia, Pa.

31-Nov. 4 Annual Convention, Southern Medical Association, Fontainebleau Hotel, Miami Beach, Florida

NOVEMBER

1 Twenty-eighth Annual Meeting, Southern Chapter of the American College of Chest Physicians, in cooperation with the Southern Medical Association, Fontainebleau Hotel, Miami Beach, Florida

28-Dec. 1 Clinical Meeting of American Medical Association, New Orleans, Louisiana

DECEMBER

4-9 Thirtieth Annual Meeting, The American Academy of Dermatology, Palmer House, Chicago, Illinois

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their summer and fall meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

PUBLIC HEALTH PAGE

Environmental Policy of the Department of Health

WILLIAM P. MCELWAIN, M.D., M.P.H.
Commissioner of Health
Commonwealth of Kentucky

and

RALPH C. PICKARD, B.S.C.E., M.P.H.
Deputy Commissioner for Environment
Commonwealth of Kentucky

THE redirection of the requirements of society today toward a total well-being concept, and not merely the absence of disease, dictated that attention be directed to the organizational structure and the program direction of the Department of Health.

It was evident that if the Department was to accept the challenges being brought about in the environmental field by technological changes and advancements, that a reorganization of the Department was in order. This culminated in the issue of Executive Order No. 71-225, which was discussed in a previous article.[1]

That the Department has been actively engaged in various environmental programs of great import since its creation is a well established fact.

A careful and thorough search of the records of the Department revealed, however, that in spite of the long history in defending the environment against degradation, that no policy statement regarding the environment had ever been promulgated.

This then dictated the delineation of a statement of policy with respect to man and his environment. That statement is set forth in the following paragraphs.

State Department of Health— Policy of the Environment

It is the policy and intent of the State Department of Health to preserve, protect, and enhance the health, total well-being, and enjoyment of man in his environment. The environmental policy further includes the establishment and expansion of such broad based environmental programs as may be necessary to intercept the cycle of environmental degradation and to eliminate and limit such insults to the environment as may now be occurring or may be proposed. The thrust of this policy is toward prevention and shall be all inclusive of the rights of the citizens of the Commonwealth to a full and enjoyable life. It encompasses the totality of man in his environment and includes the community environment, the working environment, and the insured protection of the recreational needs of man in his daily pursuits. The establishment of such policy dictates the establishment of programs to protect the air man breathes, the water he uses, the landscape he views, the food he eats, and allied programs such as noise which may impinge on the mental well-being of man.

The policy of operation of the environmental programs recognizes the complexities of today's

urban and technologic society, the socio-economic aspect of such society and, therefore, the need for recognition of the interrelationship of problems and programs as may be attendant to efficient environmental management. It further recognizes that if efficiency and effectiveness are to be attained, then proper and systematic planning must be carried out at all levels.

Comments

The above statement clearly sets forth the governing philosophy of the Department with respect to the environment.

It remains for each Division to develop its own specific policy statement with respect to its direction toward fulfilling the overall policy. These are presently being developed. With their conclusion, there should be no question remaining with respect to the Department and the environment.

The real test will come in the implementation of the policy. If the objective is to be accomplished, it will take the combined effort of the Department, and the professionals in practice, supported strongly by the people.

Reference

1. Public Health Page, *The Journal of the Kentucky Medical Association,* May, 1971.

MEDICAL SCHOOLS

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Department Of Anatomy
Health Sciences Center, University Of Louisville

Staff

James B. Longley, Ph.D. (University of Cambridge)	Professor and Chairman, Department of Anatomy
Richard H. Swigart, Ph.D. (University of Minnesota)	Professor; Assistant Dean, Student Affairs, School of Medicine
Charles E. Wagner, Ph.D. (Indiana University)	Professor; Assistant Dean, Admissions, School of Medicine
Frank J. Swartz, Ph.D. (Western Reserve University)	Professor
Frederick K. Hilton, D.Sc. (Johns Hopkins University)	Associate Professor
Robert V. Gregg, Ph.D. (University of Southern California)	Associate Professor; Coordinator,Anatomical Sciences, School of Dentistry
Richard D. Rink, Ph.D. (Tulane University)	Assistant Professor
George H. Herbener, Ph.D. (University of Louisville)	Assistant Professor
David E. Hinton, Ph.D. (University of Mississippi)	Assistant Professor, Research Associate, Water Resources Laboratory of the University of Louisville
Jerry P. Friend, Ph. D. (University of Cincinnati)	Assistant Professor
Richard A. Yeasting, Ph.D. (University of Louisville)	Assistant Professor
Jack E. Hubbard, Jr., Ph.D. (Loyola University, Chicago)	Instructor

The Department of Anatomy has as its main responsibility the introduction of medical and dental students to the structural framework (with its pertinent language) within which human life processes take place. Usually these students belong to the class just entering medical or dental school each year, but since learning is never done, the Department is interested in working with other students of whatever age in continuing the educational process.

As a practical matter, beyond the critical first year we assist undergraduate students to prepare for national boards in anatomy, take part in residency programs on request, and are beginning to offer special postgraduate courses such as that to be given by Doctor Gregg on the temporomandibular joint this September.

In addition to formal course offerings, we try to further anatomical knowledge by making the facilities of the Department, with necessary materials, available to practicing physicians who wish to dissect, and by supplying anatomical materials to hospitals having organized and pertient postgraduate education programs elsewhere in Kentucky.

The Department considers that it has an obligation to contribute to anatomical knowledge and to the training of young anatomists to replace those of us who may be wearing out. Ten students have earned their doctorates with us in the past three years; all of these are in teaching and research positions or are undergoing further training elsewhere. Three or four more should complete their studies this year.

Research in the Department, exemplifying the definition of anatomy as "what an anatomist does," embraces such fields as cardiac and pulmonary physiology, endocrinological aspects of behavior, polyploidy and its biological significance, biological systems as detectors of environmental pollution, the plasma binding of steroid hormones changes in mitochondria with aging, and factors contributing to survival after hypothermia.

An area of service in which the Department has shared the frustrations of the rest of the nation has been in its participation as the representative of anatomy in the broad program mounted by the AMA for the past several years, with the cooperation of the U.S. Agency for International Development, having the goal of assisting the development of medical education in Vietnam. Three visitors from Vietnam will be in training in the Department this year.



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

Pre-Admission Testing

Q. What is Pre-Admission Testing (PAT)?

A. PAT is a voluntary program between Blue Cross, its Member Hospitals, and their medical staffs to provide coverage for out-patient tests such as laboratory examinations, x-rays, and E.K.G.'s done at the hospital prior to a scheduled admission as an in-patient. Pre-Admission Testing is available only at a Member Hospital that has executed formal agreement with Blue Cross to implement the program.

Q. What is the purpose of Pre-Admission Testing?

A. PAT is designed to shorten the in-patient stay by having results of testing available at the time of admission so that prompt therapeutic care can follow. PAT can also help to alleviate some of the bed shortage in hospitals where it is utilized and may permit better scheduling within x-ray and laboratory departments.

Q. Under what conditions would PAT benefits be provided?

A. Three conditions are necessary for PAT benefits to apply:

1. *The patient must be scheduled for admission prior to the Pre-Admission Testing.*
2. *The use of PAT will reduce the length of in-patient stay.*
3. *The results will be relevant to the diagnosis and medically valid at the time the patient is admitted.*

Q. How does PAT work?

A. There are four steps to be followed:

1. *The physician schedules the in-patient admission.*
2. *The physician orders the Pre-Admission Testing in writing on a special form provided by Blue Cross.*
3. *The patient must visit the hospital as scheduled for testing prior to admission.*
4. *Test results are reported to the physician and are on the chart at the time of admission.*

Q. Can PAT be used to determine if in-patient hospitalization is necessary?

A. No, PAT should not be used to determine if in-patient care is necessary, and no payment would be made for testing done for this purpose.

Q. If a hospital and its Medical Staff agree to use PAT, will the physician be bound to use only this system?

A. PAT is a voluntary program and no physician will be required to perform Pre-Admission Testing. PAT is simply an approach designed to promote more efficient use of providers and facilities.

Q. Who is eligible for PAT coverage?

A. All Blue Cross members are eligible for PAT who receive testing as directed by the physician at a Member Hospital which has executed a formal agreement with Blue Cross Hospital Plan, Inc.

Q. How many hospitals are participating in the Pre-Admission Testing Program?

A. At present, 22 Member Hospitals have signed agreements to participate in PAT. Many more have expressed interest in the program and may execute a participating agreement in the near future.

Q. How can a physician receive more information about Pre-Admission Testing?

A. Any physician wanting more information about PAT may contact the Professional Relations Department, Kentucky Physicians Mutual, Inc., 3101 Bardstown Road, Louisville, Kentucky 40205.

It's working, even when she's not.



10:30 p.m. To bed with tablets or suspension. Either dosage form of Gantanol® (sulfamethoxazole) provides reliable therapy for nonobstructed cystitis.

The convenient *b.i.d.* schedule lets the patient rest assured—while Gantanol fights the infection.

1:30 a.m. Antibacterial blood and urine levels build fast. Peak therapeutic effectiveness starts within 2 to 3 hours of the initial dose.

In addition, Gantanol diffuses readily into interstitial fluids for antibacterial activity at the foci of the infection.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases or children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient indi



4:30 a.m. Effective through the night. Each dose of Gantanol (sulfamethoxazole) delivers up to 12 hours of antibacterial action against susceptible athogens, such as *E. coli, Klebsiella-Aerobacter, S. aureus* and others. ction all day. And action all night to prevent retained urine from ecoming the medium for bacterial proliferation.

7:30 a.m. With a built-in margin of protection. Gantanol *b.i.d.* herapy means rapid symptomatic mprovement, often in 24 to 48 hours, for nost patients with nonobstructed urinary ract infections.



n nonobstructed urinary tract infections

Gantanol® B.I.D. (sulfamethoxazole)

Tablets/Suspension

12 hours of therapy with every dose

duals. In the latter, dose-related hemolysis may occur. aintain adequate fluid intake to prevent crystalluria and one formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, lastic anemia, thrombocytopenia, leukopenia, hemolytic emia, purpura, hypoprothrombinemia and methemoglobiemia; *allergic reactions:* erythema multiforme (Stevens-hnson syndrome), skin eruptions, epidermal necrolysis, rticaria, serum sickness, pruritus, exfoliative dermatitis, naphylactoid reactions, periorbital edema, conjunctival and leral injection, photosensitization, arthralgia and allergic yocarditis; *gastrointestinal reactions:* nausea, emesis, abominal pains, hepatitis, diarrhea, anorexia, pancreatitis and omatitis; *C.N.S. reactions:* headache, peripheral neuritis, ental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* ug fever, chills, toxic nephrosis with oliguria and anuria, eriarteritis nodosa and L.E. phenomenon. Due to certain emical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.

Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.

For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan

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A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm.... and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
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For complete information, consult Official Package Circular.

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *Enterobacter aerogenes*, *K. pneumoniae*, *Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.
Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective alternative therapy is available.
Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary – in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.
Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.
Dosage and Administration: The maximum total daily dose should not exceed 15 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours.

If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.
Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations. 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available – Pediatric Injection 75 mg. in 2 ml.

A.H.F.S. Category 8:12.28

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THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

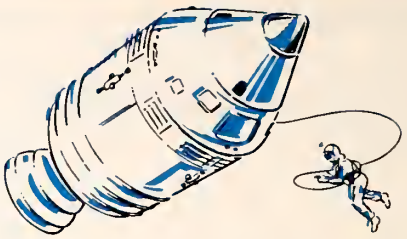
MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

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Manufacturers of Ethical Pharmaceuticals



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution a prophylaxis to prevent kidney or bladder calculi.

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NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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Manufacturers of Ethical Pharmaceuticals

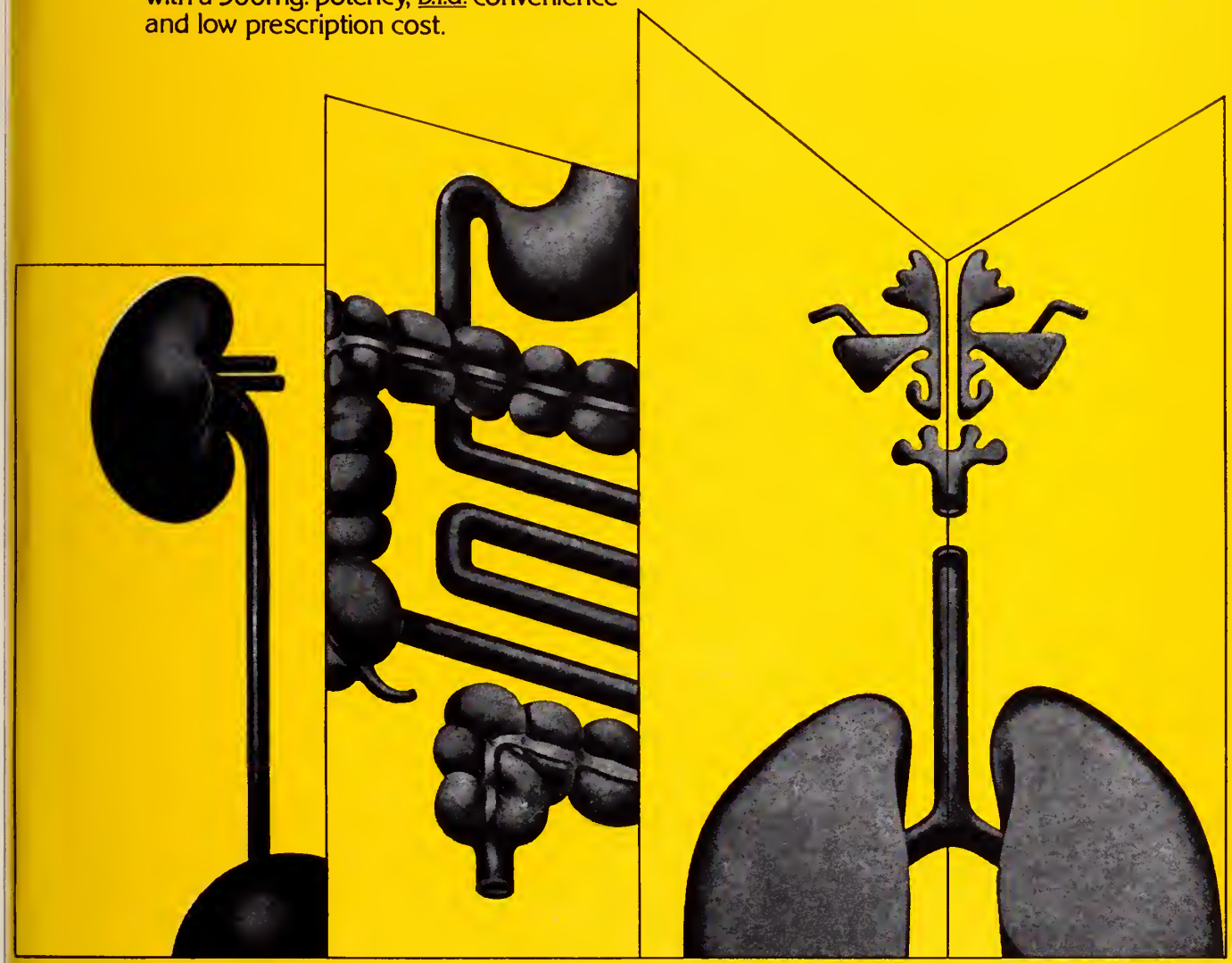
Tract Record.

Tetrex® bidCAPS® (500mg. tetracycline phosphate complex)

A record of clinical efficacy in treating bacterial infections of the respiratory, genitourinary and gastrointestinal tracts caused by susceptible strains of pneumococci, H.influenzae, staphylococci, streptococci, Klebsiellae, E.coli, Enterobacter, Shigella.

A record of years of dependable broad-spectrum activity.

A record of high urine and serum antibiotic levels all with a 500mg. potency, b.i.d. convenience and low prescription cost.



For complete information consult Official Package Circular.
(4) 2/5/71

Indications: Infections due to Rickettsiae, Mycoplasma pneumoniae (PPLO, Eaton agent), agents of psittacosis, Lymphogranuloma venereum, the spirochetal agent of relapsing fever.

Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usual Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

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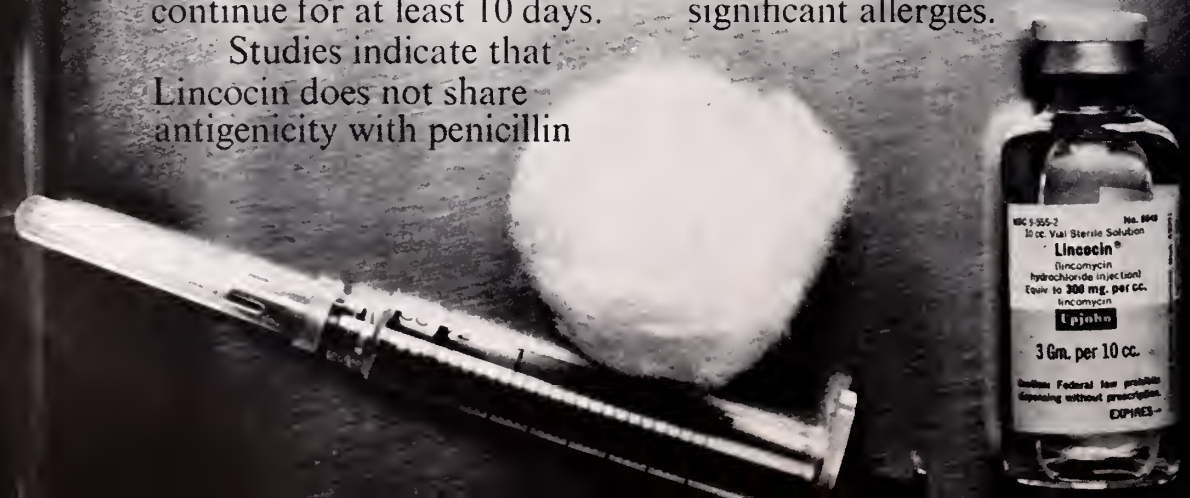
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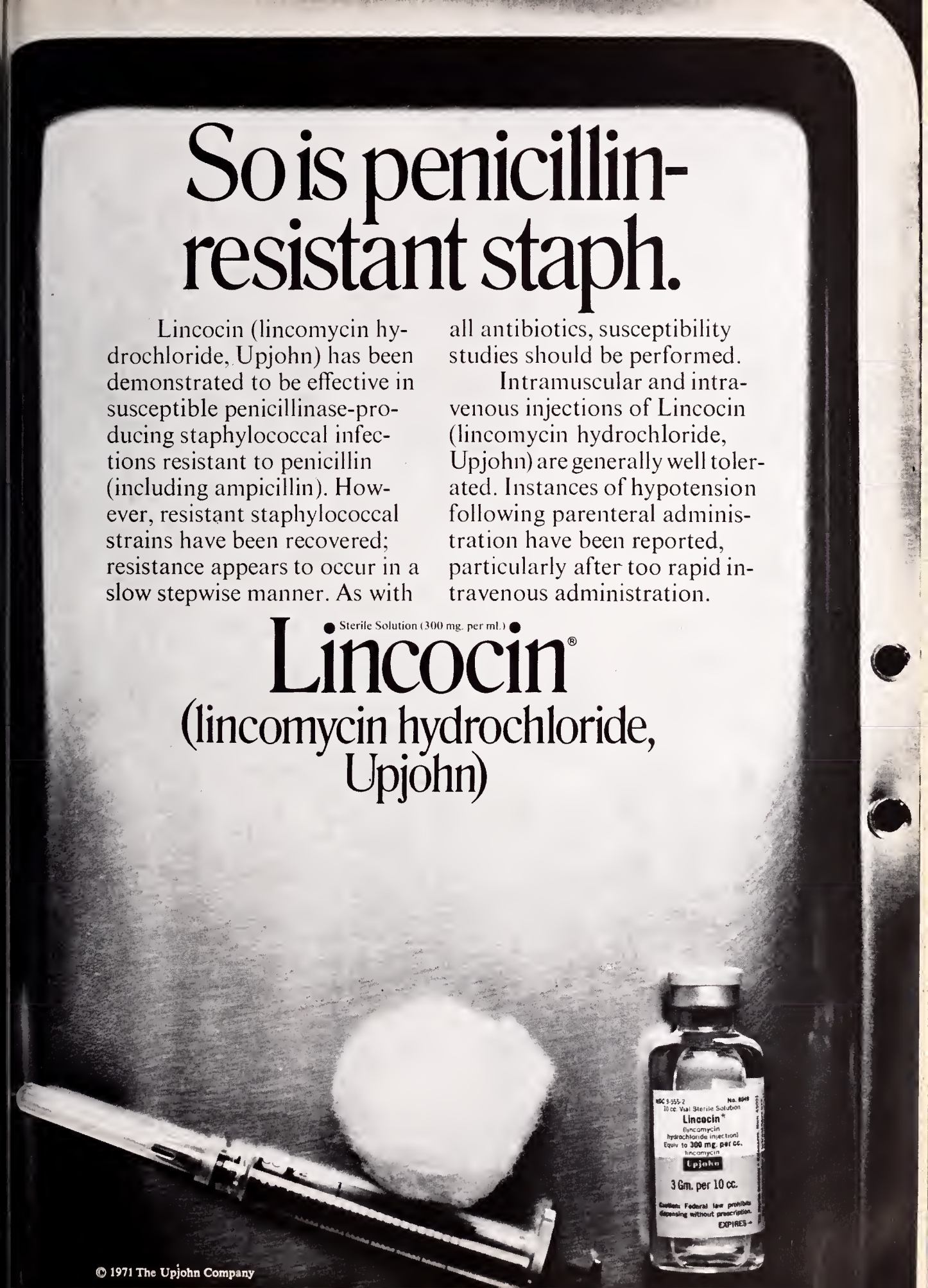
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PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

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2/ A low dosage for mild-to-moderate genitourinary infections due to susceptible organisms.

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4/ Parenteral forms remain stable up to six hours after reconstitution with sterile water ...longer than any ampicillin.

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Please see next page for brief summary of prescribing information.

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Group A beta-hemolytic Streptococcus: Tonsillitis, pharyngitis, otitis media, skin and soft tissue infections.

Diplococcus pneumoniae: Broncho- and lobar pneumonia, otitis media.

Nonpenicillinase-producing *Staphylococcus aureus*: skin and soft tissue infections, otitis media.

H. influenzae: Bronchitis and bronchopneumonia.

Escherichia coli: Cystitis, pyelonephritis, prostatitis/urethritis, skin and soft tissue infections.

Proteus mirabilis: Cystitis, pyelonephritis, skin and soft tissue infections.

Enterococcus (*Streptococcus faecalis*): Cystitis, pyelonephritis, prostatitis/urethritis.

Shigella species: Shigellosis.

Salmonella species: Salmonellosis (parenteral only).

Indicated surgical procedures should be performed.

Use parenteral drug only in severe infections or in patients unable to take oral medications.

Contraindications: A history of allergic reactions to penicillins or lidocaine.

Warning: Anaphylaxis may occur, particularly after parenteral administration and especially in patients with an allergic diathesis. Check for a history of allergy to penicillins, cephalosporins or other allergens. If an allergic or anaphylactic reaction occurs, discontinue hetacillin and institute appropriate treatment.

Usage in Pregnancy: Safety for use in pregnancy is not established.

Precautions: Mycotic or bacterial superinfections may occur. Assess renal, hepatic and hematopoietic function periodically during long-term therapy. Because intravenous administration of potassium hetacillin in doses in excess of 5 mg./Kg. has been noted to enhance the vasopressor effect of epinephrine in dogs, precautions should be taken with patients receiving epinephrine concurrently.

Adverse Reactions: Untoward reactions include: Glossitis, stomatitis, black "hairy" tongue, nausea, vomiting and diarrhea, skin rashes, urticaria, exfoliative dermatitis, erythema multiforme and anaphylaxis (usually with parenteral administration). Anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been noted, are usually reversible and are believed to be hypersensitivity phenomena.

Elevations in one or more liver function tests have been reported without any evidence of hepatic toxicity.

Local reactions: Thrombophlebitis at the site of intravenous injection has been reported.

Usual Dosage: Patients weighing 90 lbs. or more: 225 mg. q.i.d. Patients weighing less than 90 lbs.: 2.5 mg./lb. q.i.d.

Group A beta-hemolytic streptococcal infections should be treated for at least 10 days. Administer oral preparations in a fasting state to insure maximum absorption.

Recommended dosages (expressed in terms of ampicillin activity) in susceptible mild-to-moderate infections*

Versapen* (hetacillin) **112.5 mg.**	Chewable Tablets	*Usual pediatric dosage*: 10 mg./lb./day in 4 equally divided doses. For a 45 lb. child: one tablet *q.i.d.*
	Oral Suspension (112.5 mg./5 ml.)	*Usual pediatric dosage*: 10 mg./lb./day in 4 equally divided doses. For a 45 lb. child: 1 tsp. *q.i.d.* Available in 40 ml., 80 ml., and new 100 ml. bottles.
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	I.V. I.M. with Lidocaine HCl (20 mg/vial)	*For patients weighing 90 lbs. or more*: 225 mg. *q.i.d.* *For patients weighing less than 90 lbs.*: 10 mg./lb./day in 4 equally divided doses.

*For severe infections—Adults: 450 mg. *q.i.d.* Children up to 90 lbs.: 20 mg./lb./day in 4 equally divided doses. Very serious infections may require very high doses and prolonged therapy. *Note:* Versapen* has been issued Patent No. 3198804

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Warnings: May impair alertness; operation of automobiles and other activities made hazardous by diminished alertness should be avoided. If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed; erythema multiforme, including Stevens-Johnson syndrome (with a fatal case), has been associated with thiabendazole therapy in children. Safe use in pregnancy or lactation has not been established.

Precautions: Since thiabendazole is metabolized in the liver and excreted by the kidneys, hepatic and renal function should be carefully monitored in patients with dysfunction of these organs.

Adverse Reactions: Frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, collapse, abnormal sensation in eyes, blurring of vision, hyperirritability, numbness, hyperglycemia, xanthopsia, enuresis, perianal rash, cholestasis and parenchymal liver damage, hypotension, and a transitory rise in cephalin flocculation and SGOT. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. Appearance of live Ascaris in the mouth and nose has been reported on rare occasions.

Some patients may excrete a metabolite which imparts an odor to urine, much like that which occurs after ingestion of asparagus. Crystalluria without hematuria has been reported on occasion, but has promptly subsided with discontinuation of therapy; while the etiologic role of thiabendazole has not been established, the possibility of crystalluria should be kept in mind. Transient leukopenia has been reported in a few patients, but the cause and effect relationship in these cases has not been established.

NOTE: In children weighing less than 30 pounds, clinical experience with thiabendazole for treatment of intestinal parasitosis has been limited. Thus, the benefits of this therapy should be weighed against the possibility of adverse reactions.

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Asymptomatic Proteinuria—Review of Physiology and Clinical Implications

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Lexington, Kentucky

The physiology of proteinuria, standard laboratory tests for detection, incidence among population groups, and clinical studies in patients with persistent proteinuria are reviewed. A diagnostic approach to the asymptomatic patient with proteinuria is proposed.

THE unexpected finding of proteinuria in the asymptomatic patient is a common clinical event. On occasions, such proteinuria has been ignored by the physician or patient and has resulted in the eventual reappearance of the patient with severe terminal uremia beyond the point of rehabilitation with chronic dialysis or renal transplantation. On other occasions, the finding of proteinuria has caused unnecessary worry in patients in whom proteinuria is a benign laboratory abnormality.

An anecdote concerning Richard Bright, M.D., the father of clinical nephrology, illustrates the latter point.[1] Doctor Bright was consulted by a 45 year old physician who had found protein in his own urine. Doctor Bright expressed an opinion of a poor prognosis and death within several years. Accordingly, the physician quit his practice and retired to the country to await the inevitable. This physician remained in the country for 43 years and finally died of a stroke, still having proteinuria until the time of his death.

The purpose of this report is to review the physiology of proteinuria and previous clinical experience in groups of patients with proteinuria and, in doing so, attempt to formulate a rational approach to the patient in whom proteinuria is detected.

Physiology of Proteinuria

It is well known that small amounts of protein are filtered in the glomerulus and appear in the glomerular filtrate. Approximately 30 different plasma proteins have been found in very small amounts in normal urine. Micropuncture studies in the experimental animal have shown that the glomerular filtrate contains approximately 5 to 15 mg per cent of protein, approximately 20 per cent of which may be albumin. It has been estimated in man that approximately 5-30 g/day of protein appears in the glomerular filtrate and is presented to the renal tubules.[2] Since normal protein excretion in man is less than 150 mg/day, a great deal of protein must be reabsorbed by the kidney tubules. The physiology of tubular protein reabsorption has been carefully studied[3, 4] but our knowledge in this area is incomplete.

Several mechanisms exist in the patient with significant renal disease which may account for excess proteinuria. In patients with glomerular injury, increased permeability may allow the leakage of more protein than the renal tubules

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can reabsorb. The relative size of the glomerular leak may be estimated by determining the relative excretion of plasma proteins, dextran, or polyvinyl pyrrolidone molecules of differing molecular sizes. In this way, an index of glomerular selectivity may be calculated. In general, the greater the glomerular selectivity (i.e. the excretion primarily of only albumin and smaller sized proteins) the lesser the degree of histological glomerular injury is noted. These studies have been of some practical importance in distinguishing the steroid responsive patient with the nephrotic syndrome from those with more significant glomerular injury in whom steroid irresponsiveness is the rule. Application of these techniques to experimental study of the mechanisms of glomerular injury may prove to be of far more importance.

In patients with primary tubular diseases, such as chronic cadmium poisoning, a different type of proteinuria may occur. Tubular proteinuria consists of a relative increase of small molecular weight proteins which normally would be reabsorbed in the patient with only glomerular injury and may therefore be of diagnostic importance. In addition, an excess amount of small molecular weight plasma proteins may appear in the urine and be detected by protein screening tests in the absence of significant renal disease. Among these are the Bence-Jones protein of multiple myeloma and other small molecular weight proteins occurring in patients with terminal cancer.

One other aspect of protein handling by the kidney requires emphasis. Postural changes have been documented to affect protein handling by the normal human kidney. In a study of normal subjects, albumin excretion was almost undetectable by immunological techniques during the supine resting position but increased significantly upon assuming the quiet upright position.[5]

A similar pattern, although at higher levels of protein excretion, occurs in both patients with documented orthostatic proteinuria and those with persistent proteinuria due to chronic renal disease. This postural effect on protein excretion may be due to changes in glomerular capillary pressure and permeability, especially after heavy exercise in which excess transient proteinuria is very common. It has also been suggested that protein leak from renal lymphatics may contribute to postural proteinuria.[6]

Standard Laboratory Tests for Proteinuria

Routine laboratory tests for the detection of proteinuria are usually insensitive to the small amounts of protein which may normally occur and are designed to detect protein in the urine at the concentration of approximately 30 mg per cent (300 mgm per liter of urine). The commonly used indicator strips rely upon the "protein error" of the indicator, Tetrabromphenol-blue, in the presence of protein. A trace reaction for urinary protein is generally considered to be meaningless.

One study has indicated that a 1+ reaction is associated with significant protein excretion in roughly 50 per cent of the samples, whereas a 2+ reaction has a very high correlation with the presence of significant urinary protein excretion.[7] False negative reactions with the indicator sticks may occur in the presence of very acidic urine and false positives may occur in the presence of very alkaline urine or prolonged immersion of the strip. Bence-Jones protein alone should not react with the indicator strips. The older coagulation methods of determining urinary protein (heat—acetic acid, nitric acid or sulfosalicylic acid) are more reliable, but also somewhat more cumbersome. They are of considerable importance, however, in confirming the presence of proteinuria detected by the indicator strips and also in determining the quantitative protein excretion over a given period of time.

False positive reactions with sulfosalicylic acid may occur after very large doses of penicillin or injection of contrast media. Determination of the quantitative protein excretion in a 24 hour sample is a very useful test. An occasional patient may have normal protein excretion (less than 150 mg/day), but have positive urinalysis tests for protein because of concentrated urine samples or other reasons. Twenty-four hour testing will eliminate the need for further testing in such a patient. In

addition, the amount of protein may be of diagnostic value. For example, protein excretion of 3 grams or greater is highly likely to be associated with glomerular disease.

Incidence of Proteinuria

There is a considerable amount of data available concerning the incidence of proteinuria in certain population age groups. In one representative study involving almost 5,000 school children, the incidence of proteinuria on the initial urinalysis was found to be 5.4 per cent.[8] The incidence of proteinuria rose significantly to levels of 10-12 per cent in both males and females at the time of puberty and then began to decline. The reason for the higher incidence of proteinuria at the time of puberty is not known. When the same group was rescreened, however, less than 1 per cent of the initial population were found to have proteinuria on two occasions.

In several screening studies involving at least 20,000 young males, the incidence of proteinuria was found to be 5 per cent and upon retesting, 0.6 per cent were found to have proteinuria on two occasions.[9, 10] When a large general population is screened, the incidence of proteinuria is somewhat higher between the age of 10 and 19, reflecting the proteinuria of adolescence, and then declines to between 2 and 3 per cent of the general population until age 50, at which time the incidence of proteinuria begins to increase.[11] In this latter age group, the proteinuria is correlated with an increasing incidence of renal disease (both primary and secondary to hypertension and diabetes).

When asymptomatic patients with proteinuria upon the initial screening examination are restudied, it is generally noted that the great majority have transient proteinuria associated with viral infections, exercise, or false positive reactions. In the younger age groups in whom proteinuria is documented a second time (about .6 per cent), it appears that the majority will have proteinuria on the basis of transient orthostatic proteinuria, a finding of little significance. A small number of the remaining group (perhaps 10-20 per cent) will be found to have either easily diagnosed renal or urologic disease in which the proteinuria does not represent a diagnostic problem or will have persistent proteinuria without apparent reason. It is this latter group with whom we are primarily concerned—i.e., asymptomatic patients with persistent proteinuria.

Clinical Experience

Since the advent of renal biopsies, the causes for asymptomatic proteinuria and the prognosis in this group of patients are becoming more clear. The type of proteinuria may be classified into the following categories:[12]

1. Fixed orthostatic—proteinuria can be repeatedly documented to occur only in the upright position.

2. Constant—proteinuria is always present in both the resting and upright positions.

When posture has not been controlled:

3. Intermittent—proteinuria absent occasionally but present in majority of samples.

4. Persistent—proteinuria present in all samples.

In Table I the results of several histological studies have been summarized. The great majority of abnormal lesions found on renal biopsy have been that of glomerular disease, although primary involvement of the renal interstitium occasionally may be found. A recent ten year follow-up of patients with fixed orthostatic proteinuria did not reveal deterioration of function in a single patient, although 50 per cent still had proteinuria.[13] Despite the much higher incidence of renal lesions in patients with intermittent or persistent proteinuria

TABLE I

Renal Biopsy in Patients With Asymptomatic Proteinuria

Type of Proteinuria	Series	No. of Patients	% with Definite Abnormalities	% with Minimal Lesions	% Normal
Fixed Orthostatic	Robinson (13)	51	10%	45%	45%
Intermittent	Muth (14)	50	61%	8%	31%
Persistent	Pollak (15)	19	84%	10%	6%
	Phillippi (16)	50	74%	12%	14%

as compared to those with orthostatic proteinuria, prognosis appears to be good in the few recorded studies.[14, 15, 16, 17] It should be noted that renal function was normal at the outset in all of these patients, some of whom had mild hypertension. In other patients with slight impairment of renal function or microscopic hematuria, however, the ultimate prognosis was more guarded.

Approach to Asymptomatic Patient

A suggested approach to the evaluation of patients with asymptomatic proteinuria is outlined in Table II. As has been noted, the majority of asymptomatic patients with proteinuria will be found to have either transient proteinuria or orthostatic proteinuria.

Table II

Persistent Proteinuria in the Asymptomatic Patient: Diagnostic Approach

1. Eliminate transient or orthostatic proteinuria
2. History and physical examination
3. Quantitative 24 hour protein excretion
4. Appropriate laboratory and radiographic examination
 If normal—follow at 6-12 month intervals
 If abnormal—consider renal biopsy

A simple rescreening of another urine sample (collected immediately after overnight bedrest) will eliminate both transient proteinuria and orthostatic proteinuria in most instances. Because of the apparent benign prognosis of patients with fixed orthostatic proteinuria, further studies are not mandatory at this time. In the minority of patients in whom proteinuria is again detected, one should determine the 24 hour quantitative protein excretion in order to eliminate those with normal protein excretion and also to establish the amount of proteinuria as a diagnostic test.

If significant proteinuria is documented, a review of the history may reveal previously unsuspected familial nephritis, a history of analgesic abuse or other clues. The physical examination may reveal polycystic kidneys, moderate to severe hypertension, or other abnormalities. Careful urinary sediment examination should be performed to look for abnormal casts which may in themselves be of diagnostic value (i.e., red blood cell casts in glomerulonephritis, white blood cell casts in chronic pyelonephritis or interstitial nephritis) and an estimate of renal function determined—preferably, serum creatinine and creatinine clearance or, if not possible, a blood urea nitrogen level. Intravenous pyelography and urine cultures will be desirable in the majority of these patients.

If these laboratory studies are normal, we prefer to follow these patients at six to 12 month intervals with repeated urinalysis and estimate of renal function. Even though the previously mentioned biopsy studies have indicated glomerular disease in the majority of these patients, the prognosis appears to be good for at least five years and renal biopsy is usually not necessary unless there are significant employment or insurance problems which must be resolved.

If, however, urinary sediment or renal function is abnormal, not only will significant histological disease be found on biopsy as a rule, but also prognosis is more guarded. Renal biopsy should be performed in order to establish the type and degree of renal disease in order to consider further therapy such as a trial of immunosuppression in patients with active glomerular disease or vigorous control of even mild hypertension. Even if the biopsy is not of therapeutic value, it is frequently possible to give some indication of prognosis to the patient. Such an approach also encourages the long term observation and medical supervision which is important in the prevention of severe hypertension and uremic neuropathy. Failure to

control these complications may result in unsuccessful rehabilitation with chronic dialysis or transplantation, should these forms of therapy eventually become necessary.

References

1. Hawkins, F.: Two cases of albuminuria, one of twenty-five years' and the other of forty-three years' duration. *Trans. Clin. Soc. Lond.* 26:216, 1892.

2. Rennie, I.D.: Proteinuria. *Med. Clin. N. Amer.* 55:213-230, 1970.

3. Cortney, M.A., Sawin, L.L., and Weiss, D.D.: Renal tubular protein absorption in the rat. *J. Clin. Invest.* 49:1-4, 1970.

4. Maunsbach, A.B.: Absorption of I^{125}—labeled homologous albumin by rat kidney proximal tubule cells. *J. Ultrastructure Research* 15:197-241, 1966.

5. Robinson, R.R.. and Glenn, W.G.: Fixed and reproducible orthostatic proteinuria. IV. Urinary albumin excretion by healthy human subjects in the recumbent and upright postures. *J. Lab. Clin. Med.* 64:717-723, 1964.

6. Rowe, D.S., and Soothill, J.F.: The proteins of postural and exercise proteinuria. *Clin. Sci.* 21:87-91, 1961.

7. Thysell, H.: A comparison between Albustix, Hema-Combistix, Labstix, the sulphosalicylic-acid test, Heller's nitric-acid test and a biuret method. *Acta Med. Scand.* 185: 401-407, 1969.

8. Wagner, M.G., Smith, F.G., Tinglof, B.O., and Cornberg, E.: Epidemiology of proteinuria. A study of 4,807 school children. *J. Pediatrics* 73:825-832, 1968.

9. Diehl, H.S.: and McKinlay, C.A.: Albuminuria in college men. *Arch. Intern. Med.* 49:45-55, 1932.

10. Lyall, A.: The classification of cases of albuminuria. *Brit. Med. J.* 2:113-117, 1941.

11. Freedman, L.R., Seki, M., Phair, J.P., and Nefzger, M.D. Proteinuria in Hiroshima and Nagasaki-Japan: *Yale J. Biol. Med.* 40: 109-130, 1967.

12. Robinson, R.R.: Idiopathic proteinuria. *Ann. Intern. Med.* 71:1019-1022, 1969.

13. Thompson, A.L., Durrett, R.R., and Robinson, R.R.: Fixed and reproducible orthostatic proteinuria. VI. Results of a 10 year follow-up evaluation. *Ann. Intern. Med.* 73:235-244, 1970.

14. Muth, R.G.: Asymptomatic mild intermittent proteinuria. A percutaneous renal biopsy study. *Arch. Intern. Med.* 115:569-574, 1965.

15. Pollak, V.E., Pirani, C.L., Muehrcke, R.C., and Kark, R.M.: Asymptomatic persistent proteinuria: studies by renal biopsies. *Guy's Hosp. Rep.* 107: 353-372, 1958.

16. Phillippi, P.J., Reynolds, J., Yamauchi, H., and Beering, S.C.: Persistent proteinuria in asymptomatic individuals: Renal biopsy studies on 50 patients. *Military Med.* 131:1311-1317, 1966.

17. Antoine, B., Symvoulidis, A., Dardenne, M., De-Montera, H., and Bach, J.: L'etat de proteinurie permanente isolee. II. Stabilite evolutive. *Presse Med.* 77:51-53, 1969.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Aldosteronoma

F. Albert Olash, M.D., F.A.C.P., John A. Hemmer, M.D., F.A.C.S., and Edward J. Fadell, M.D., F.C.A.P.*

Louisville, Kentucky

Primary Aldosteronism as a cause of hypertension is considered rare when judged by the few surgically proven cases in Jefferson County, Kentucky. The following case illustrates the work-up necessary to establish this diagnosis.

THE potentially curable forms of hypertension are uncommon and are usually of renal or adrenal orgin. The adrenal causes are tumors of the medulla which secrete catecholamines, and tumors or occasionally hyperplasia of the cortex which secrete aldosterone.

Hypertension is a constant feature of primary hyperaldosteronism. The prevalence of increased aldosterone secretion from neoplasia or hyperplasia in the adrenal glands with associated hypertension is unknown.

Conn has suggested that a single cortical adenoma could be found in perhaps 20 per cent of the hypertensive population; hence, there would be between 2,000,000 and 3,000,000 adrenal adenomas causing hypertension in the United States.[1]

In a series of 1,495 consecutive necropsies in patients aged over ten years, the prevalence of adrenal cortical adenoma was 1.41 per cent, and of adrenal hyperplasia, 7.37 per cent. It was felt by the group at Johns Hopkins Hospital conducting this investigation that the prevalence of hypertension was virtually identical in adrenal adenoma, adrenal hyperplasia, and comparable controls. The results of their investigation did not support the view that approximately 20 per cent of hypertensives may have an adrenal adenoma with associated primary aldosteronism.[2]

Hypertension with associated hypokalemia and increased aldosterone secretion are the prime indications of an aldosterone-producing adrenal lesion. The associated reduced renin activity has aided the diagnosis and has been used by Conn to describe a group of patients with normokalemic primary adosteronism in association with small adrenal cortical adenomas.[3]

The rarity of primary aldosteronism as a cause of hypertension is well illustrated by the few surgically proven cases in Jefferson County, Kentucky. Although frequently sought for, only one surgically proven case has been recognized at the Methodist Evangelical Hospital, Louisville, Kentucky. The following is a report of this solitary case.

Case Report

Mrs. N. D., a 49 year old woman, was first seen on February 15, 1971. She had been married 32 years and was the mother of 11 children, ages 31 to 11. Referral was for treatment of high blood pressure of eight years duration, and pain in her neck and jaw. She was known to have a multi-nodular goitre.

The patient had been treated for hypertension without significant relief of symptoms or lowering of her blood pressure. Her neck and jaw pain was classically anginal. She complained of extreme nervous tension, skipping of her heart, constipation, and nocturia. There was a history of previous hysterectomy five years ago, a Cesarean Section, and an appendectomy.

On physical examination, her height was five feet, four and 3/4 inches, and her weight 166 pounds. She was ambulatory, but complained of significant neck pain and headaches.

The positive findings were limited to blood pressure of 290/160 in both arms and a systolic pressure of 290 in both legs. There was cardiomegaly with a Grade III left ventricular enlargement, a Grade 3/6 ejection systolic murmur at the base, and a holosystolic murmur (intensity 3/6) at the mitral area. The fundi had tortuous arterioles with increased stripping and a disc-diameter flame-shaped

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hemorrhage medial to the left disc. The multinodular goitre was noted. Cardiac failure was not evident. The electrocardiogram had findings of left ventricular hypertrophy and strain with a QT interval of 0.44, and a prominent U-wave.

The patient was hospitalized to complete the hypertensive evaluation. A rapid sequence IVP was normal. Her daily Serum Potassium levels were recorded as 2.4, 2.4, 2.4, 2.6, and 2.6 mEq/1. The PCO_2 was 45, Sodium 143 mEq/1, Chlorides 100 mEq/1, and pH 7.5. A VMA was 2.3 mgm/24 hr., and a 24 hour urinary Potassium excretion 44 mEq/volume. The Plasma Renin was 103 nanograms/100 ml., with a normal of 75 to 275; and the urinary Aldosterone was 32 mcgm/24 hr., with a normal of 2 to 26.

The repeated low Serum Potassium levels, normal Plasma Renin, elevated Aldosterone excretion, normal urinary Hydroxycorticosteroids, and no evidence of unilateral renal disease all supported the diagnosis of hypertension on the basis of hyperaldosteronism.

On March 23, 1971, abdominal exploration was performed. The left side was approached first, and a solitary cyst was found in this adrenal. The cyst was excised with approximately 30 per cent of this adrenal gland. The right adrenal was then explored. A 1.7 cm. cortical adenoma was present and removed (Figure 1).

Postoperatively the patient did well. On the second day, she experienced some hallucinations which responded to conservative therapy. Minimal steroid supportive therapy was continued for six days postoperatively. During this time the blood pressure dropped significantly. She was discharged free of headache and neck pain with a blood pressure ranging between 150 and 160 systolic, and 90 to 100 diastolic.

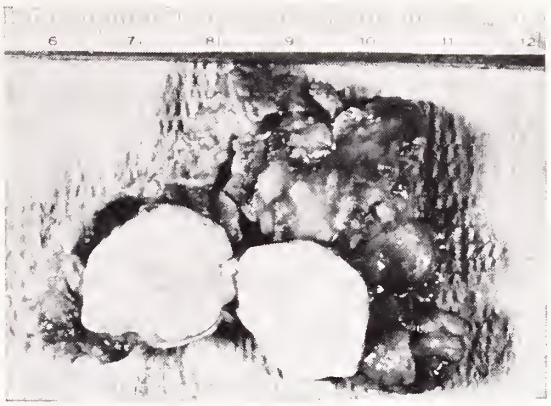


FIGURE 1 Gross appearance of the adrenal cortical adenoma. The adrenal gland proper is present in the background.

Discussion

The diagnosis of hyperaldosteronism was suggested by the associated hypertension, hypokalemia, and increased aldosterone excretion. Continued urinary potassium loss was present. Potassium loss in the face of hypokalemia is unusual except for conditions associated with mineralocorticoid excess.

Sodium-losing renal disease was excluded by the persistent high serum sodium levels. Unilateral ischemic renal disease may result in hyperaldosteronism. However, one would anticipate plasma renin values to be well above the normal level, in that the increased aldosterone secretion would be a consequence of increased renin production by the ischemic kidney. While plasma renin concentrations are nearly always low in primary aldosteronism, the value is not alway subnormal.[4]

Cushing's Syndrome was excluded by lack of the usual physical stigmata and also by the normal urinary excretion of 17-Hydroxycorticosteroids.

Although not felt necessary in this case, additional studies may be of help in questionable cases. In the event that increased secretion of aldosterone is present with associated normokalemia, it is possible to produce hypokalemia in instances of primary hyperaldosteronism by large oral sodium loads. Hypokalemia will invariably develop in these subjects.[5] One can compare the 24 hour urinary potassium clearance before and after three days of oral administration of Spironolactone while the patient is on a high salt diet. Greater than 50 per cent reduction in potassium clearance after administration of Spironolactone indicates pathologic secretion.[6] Rarely unilateral renal artery disease or malignant hypertension will give similar results, and must be excluded by other means.

An additional aid is the administration of desoxycorticosterone acetate in association with a high sodium intake for three days. Aldosterone secretion is measured just before and on

the third day. Failure to reduce urinary aldosterone levels into the normal range, or to depress normal levels, is significant evidence of an adrenal lesion.[7]

Aldosterone urine levels should be measured with the patient on a normal or high sodium diet. Normal subjects on a low sodium diet will have increased urinary aldosterone as a result of stimulating the renin-angiotension system. After four days of a 10 meg. sodium diet and having been upright for four hours, normal subjects will have a plasma renin greater than 600 ng. per 100 ml., whereas individuals with primary aldosteronism will usually not exceed 401 ng. per 100 ml.[8]

Unfortunately, the repeated testing sometimes necessary for an absolute biochemical support of this diagnosis entails time and cost. Additionally, the results may infrequently overlap with findings in control groups.[4]

A few appropriate studies in conjunction with clinical judgment should assure adrenal pathology in most instances. A logical approach is the establishment first of persistent or intermittent hypokalemia in the hypertensive patient who has been off of diuretics for at least one month. Forearm exercises should be avoided in drawing the sample for potassium analysis, and handling by the laboratory should be such to prevent hemolysis. A plasma sample for renin assay following a low salt intake and a 24 hour urine sample for aldosterone excretion following a normal or high sodium intake should be submitted to a highly qualified laboratory capable of accurately performing these determinations. Instructions for handling these specimens should be followed closely.

Following surgical removal of an adrenal adenoma or resection for hyperplasia, normal blood pressure restoration can be anticipated in about 75 per cent, and significant amelioration in an additional 15 per cent of patients. All patients should have resultant normokalemia.[8]

References

1. Conn, J. N.: Plasma Renin Activity in Primary Aldosteronism: Importance in Differential Diagnosis and in Research of Essential Hypertension. *JAMA* 190:222, 1964.

2. Kokko, J. P., et al: Adrenal Adenoma and Hypertension. *Lancet* 1:468, 1967.

3. Conn, J. N., et al: Normokalemic Primary Aldosteronism: Detectable Cause of Curable "Essential" Hypertension. *JAMA* 193:200, 1965.

4. Brown, J. J., et al: Plasma Electrolytes, Renin and Aldosterone in the Diagnosis of Primary Hyperaldosteronism. *Lancet* 1:55, 1968.

5. George, J., et al: The Syndrome of Primary Aldosteronism. *Am. J. Med.* 48:343, 1970.

6. Kirchall, R., and Batson, H.: Test for Pathologic Secretion of Aldosterone. *JAMA* 206:2114, 1968.

7. Biglieri, E. G., et al: Diagnosis of an Aldosterone Producing Adenoma in Primary Aldosteronism. *JAMA* 20:100, 1967.

8. McCoy, R. M., et al: Primary Aldosteronism: Review of 12 Cases and Present Diagnostic Criteria. *So. Med. J.* 61:303, 1968.

Management of Carotid Body Tumors

David A. Hull, M.D., Gordon L. Hyde, M.D., and John M. Stoeckinger, M.D.

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The authors present their experience with the surgical management of carotid body tumors. Case reports, review of clinical features, and problems related to the removal of these tumors are presented.

SURGICAL treatment of carotid body tumors has undergone changes in the past several years which have prompted the authors to consider this rare tumor in light of the problems occuring with its management. The authors have had the occasion to operate upon five of these tumors, occurring in four patients; this experience comprises the purpose of this report.

Case No. 1. A. P., a 45 year old white male was initially seen in November, 1962, with a lump in the left side of his neck, present for the past five years and slowly growing in size. Mild dysphagia had been noted. Past history revealed that the patient had undergone a subtotal gastrectomy in 1953 for a bleeding duodenal ulcer. Family history was significant in that he had one sibling who underwent removal of a carotid body tumor from the right side of her neck in 1939 at another hospital. Confirmation of this diagnosis has been obtained and this sibling is alive as of March 7, 1967, without any evidence of recurrence.

Head and neck examination revealed a 3 to 4 cm. fixed mass in the left side of the patient's neck in the region of the carotid bifurcation. This mass was movable laterally and the clinical impression was a carotid body tumor vs. a branchial cleft cyst.

Shortly after the patient's admission in 1962, he underwent exposure of the tumor. The mass was confirmed by biopsy to be a carotid body tumor. In view of the accepted dictum at that time that carotid body tumors should be diagnosed but removal was not mandatory, no attempt at excision was made.

In July of 1964, or approximately 18 months later, the patient returned with the complaint of an increase in size of the mass and increased dysphagia. The mass had visibly grown in size, so removal was performed. Surgery was complicated by accidental injury to the carotid artery, necessitating an immediate intra-arterial temporary, siliconized, polyetheline shunt. Because the defect could not be repaired primarily, a pre-clotted knitted Dacron graft was sutured from the distal common carotid artery to the proximal internal artery over the temporary shunt. After the shunt had been removed, blood flowed nicely through the grafted area and the patient's recovery was uncomplicated, without the development of hemiplegia, asphasia, or any neurological deficit.

This patient is alive and well with no evidence of recurrence as of January, 1971. His prosthetic graft is functioning satisfactorily.

Comment

At the initial surgery, biopsy only was performed, with no attempt at removal of the tumor. This was done because of the known dangers in removal of these tumors at that time, and their benignity. This reasoning we now know is erroneous. Familiarity with vascular techniques today render the removal of a carotid body tumor feasible with a low morbidity instead of the high morbidity associated with carotid artery ligation, formerly frequently necessary. Due to the failure of anticipating it's need, an autogenous saphenous vein graft was not readily available and a synthetic graft was substituted for arterial flow. This mistake was not made in the subsequent cases.

Case No. 2. P.C., a 22 year old white male who was seen in March of 1965, with a carotid body tumor of five years duration. The tumor had gradually increased in size, but had not produced pressure symptoms. Past and family history was negative.

Pertinent physical findings were that of a 3 x 6 cm., laterally moving mass in the right neck, over the common cartoid artery bifurcation. Remainder of the physical examination was negative.

The patient underwent removal of a carotid body tumor in a sub-adventitial manner. Some difficulty with pinpoint arterial bleeding from the carotid artery wall was encountered but this was controlled with individual vascular ligatures. At no time during the procedure was carotid artery flow interrupted.

The patient was last seen on October 7, 1967, and has no evidence of recurrence of carotid body tumor.

Comment

The technical aspects of this case presented no complications. Residual paralysis of the mandibular division of the seventh nerve was noted four months postoperatively but was not present when last seen.

Case No. 3. L.H., a 40 year old male was initially seen in December of 1964, with a history of first noticing a lump on the right side of his neck, approximately six years previously. Subsequently, a lump on the left side of his neck was noted. Both masses gradually became larger during the intervening time. Three to four months prior to the initial visit, a choking sensation was noted. Family history revealed that the patient had three siblings. One of these siblings had a biopsy of a mass and a carotid body tumor was confirmed. The other sibling is the fourth case in this series.

On examination, a mass 4 x 8 cms. in the right neck and 3 x 7 cms. on the left side were noted. Both masses were located in the region of the carotid artery bifurcation. Initial impression was that of bilateral carotid body tumors.

In January of 1965, the patient underwent removal of the right carotid body tumor. This tumor was quite large and dissection difficult because of it's size. However, sub-adventitial removal of the tumor was accomplished without interruption of the carotid arterial stream.

Follow-up visits showed a right twelfth nerve palsy from which the patient gradually recovered. This complication delayed removal of the left carotid body tumor until October of 1965; at this time, the patient was readmitted to the hospital, where the left carotid tumor was removed without incident. In November of 1970, the patient was found to have no evidence of recurrence of either tumor.

Comment

The second operation upon this patient was delayed several months because of a transient twelfth nerve paralysis. The hypoglossal nerve is always visualized during dissection but often dissection and traction will cause temporary dysfunction. Bilateral twelfth nerve paralysis is to be avoided because of the difficulty in eating and speaking with tongue paralysis.

Case No. 4. G. W., a 20 year old white female sibling of Case No. 3, initially was seen in March of 1966, with the chief complaint of a lump on the left side of her neck. This mass had been present for nine years, gradually growing in size. Four months prior to surgical consultation, pain in the left ear developed. Pertinent physical findings were limited to head and neck examination, where 3 x 4 cm. firm, non-tender lump in the region of the left carotid arterial bifurcation was present. This tumor moved laterally and preoperative impression was that a carotid body tumor.

Removal of the carotid body tumor by dissection of the adventitia of the carotid artery was accomplished in March, 1966. The external carotid artery was sacrificed at it's orgin because of marked fixation of the tumor in the region of the carotid artery bifurcation.

The patient was last seen without evidence of recurrence in August of 1966.

Comment

In order to obtain good exposure and complete removal of the tumor, the external carotid artery on the left side was ligated. This maneuver results in no sequallae and represents a technical point which may be employed if the occasion arises.

Case No. 5. A. R., a 57 year old woman who was seen in November, 1968, with a four inch diameter mass in the right side of the neck which was thought to represent a carotid body tumor. Ten years previously, exploration and biopsy had revealed a carotid body tumor. Resection was not performed and the tumor had been enlarging since that time. Recently paralysis of the eleventh and twelfth nerve had been noted.

On January 21, 1969, a carotid arteriogram was done which revealed the typical findings



Figure 1

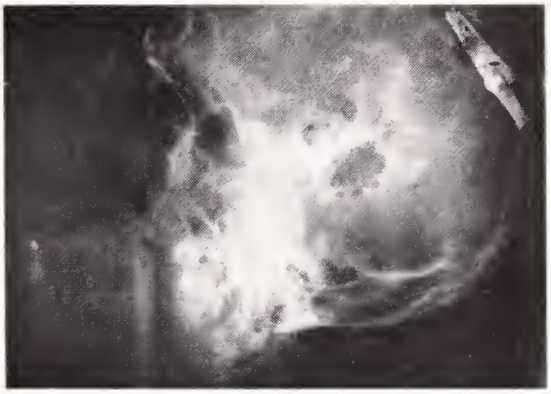


Figure 2

of a carotid body tumor (Figures 1 and 2). The patient was taken to the operating room where the tumor was excised, utilizing a Javits shunt. The procedure was technically difficult and dissection was carried out to the base of the skull. Because of severe damage to the carotid artery, it was necessary to replace this vessel with a saphenous vein graft (Figure 3). The end result was satisfactory, the graft functioned well, and no neurological deficit ensued. The patient was discharged on the seventh postoperative day with no complications.

Over the following month, a serious wound effusion developed and, in spite of this becoming infected, was treated successfully. The patient is alive and well two years postoperatively, with the graft continuing to function.

Comment

This case presented several interesting features: a) that carotid body tumors continue to grow and produce incapacitating symptoms of pressure on nerves and other vital neck structures; b) that surgical removal is the procedure of choice with present known vascular techniques; c) an autogenous vein graft should always be available; and d) with experience, these tumors can be successfully treated with little or no morbidity.

Discussion

The main characteristic of carotid body tumors is that of a mass occurring in the region of the carotid arterial bifurcation. The normal carotid body is a small, grayish neurovascular structure, functioning as a chemoreceptor and lying on the posterior aspect of the carotid arterial wall, at the level of the bifurcation of the common carotid artery. It is well encapsulated and lies within the adventitia of the carotid arterial wall, a feature which accounts for the basic concept of removal of these tumors sub-adventitially. It frequently surrounds the carotid arteries.[2]

Symptoms of a carotid body tumor are related primarily to pressure on the surrounding structures—frequently the glossopharyngeal, vagus, and hypoglossal cranial nerves and sympathetic chain—or pressure on the pharynx when the tumor assumes large proportions. In addition to pressure symptoms, local tenderness of the tumor may be present. Dysphagia is a common complaint and pain in the neck or ear may be noted. Occasionally carotid sinus syndrome is seen.[2]

The differential diagnosis from other cervical masses (bronchogenic cysts, aneurysms, metastatic carcinoma, lymphoma, and neurofibroma) should be made preoperatively.

Characteristically, these tumors occur in the 40-60 year age group, although such was not the case in this series.

Lateral mobility, as contrasted to vertical mobility, is one of the characteristic findings.

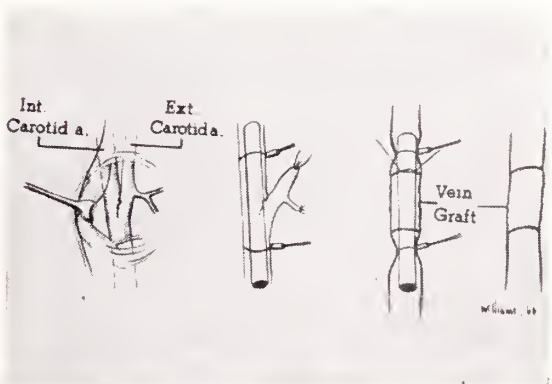


Figure 3

The hereditary tendency of these tumors has been emphasized.[4,6] This fact is well illustrated in the present series where Case No. 3 and No. 4 were siblings, with a known additional sibling having had a biopsy proven carotid body tumor. In addition, Case No. 1 had a sibling with a previously resected, established carotid body tumor. It has been reported that in one family there is frequently a member who has bilateral tumors.[4] Such was noted in the present series.

The use of carotid angiography has been employed in an effort to remove the uncertainty of diagnosis and plan a rational surgical approach.[6] In Figures 1 and 2, although not usually necessary, one can see the widened bifurcation of the carotid artery and the typical tumor flush. This was utilized in Case No. 5.

The microscopic picture of a carotid body tumor is one of large pale staining cells with large eccentrically placed nuclei occurring in a marked vascular stroma. The vascularity of these tumors is noted on most all of the microscopic fields. In addition, large chief type of cells are present and nerve cell remnants can often be visualized occurring, interspersed with the aforementioned chief cells. Microscopically, the question of malignancy is raised quite frequently; however, in spite of the occurrence of mitotic figures, a diagnosis of malignancy cannot be determined on a microscopic section.[2, 6]

Prior to recent years, most of these tumors were considered benign. However, with recent reports, their malignant potential has been recognized. Isolated case reports of tumors occurring with proven metastasis has been reported on numerous occasions. It has been estimated that, after a world review of the literature, the malignant potential of this tumor is in the neighborhood of five per cent.[3]

The indication for surgical removal of this tumor has been reviewed in recent years.[1, 3, 5, 6] Based primarily on the increased knowledge of vascular surgery, along with the fact that the malignant potential of these tumors is now recognized, their routine removal is being advocated. When the tumor produces symptoms of dysphagia, nerve compression, or pain, operative intervention should be advised. An increase in size of the tumor should be an indication for surgery. Certainly their removal is advocated before the tumors attain such size that surgery would be a hazardous undertaking.[1] As stated previously, malignancy is now considered an indication for surgery.

Prior to the days of vascular surgery, the surgical removal of carotid body tumors was fraught with the high morbidity and mortality. Of the operations performed in the past decade, ligation of the internal carotid was performed in 25 per cent. Frequently, the common carotid artery was disrupted so that interruption of the carotid arterial flow became necessary. This was associated with a mortality of 20 per cent and a 30 per cent postoperative hemiplegia. With these figures, it is evident that the complications following internal carotid artery ligation far exceeded the dangers of the untreated carotid body tumors. However, with increased vascular surgical experience, these tumors can be resected with a respectable morbidity and mortality. Rush, in 1962, reviewing 69 patients who underwent carotid body tumor removal, found one death or 1.5 per cent. Hemiplegia was noted in two patients (2.9 per cent).[3]

Either local or general anesthesia is employed. A longitudinal incision is made anterior to the body of the sternocleidomastoid muscle and the three carotid vessels are isolated proximal and distal to the tumor itself. Arterial control is imperative before attack on the tumor is made. After carotid artery control has been established, the most inferior margin of the tumor is picked up in the sub-adventitial plane between the adventitia and the media and dissection is tediously carried cephalad. As dissection and stripping of the adventitia proceeds, the tumor is elevated. Small pinpoint puncture wounds to the main arterial stream are repaired with 6-0 vascular suture. The dissection is carried to the carotid bifurcation where the point of most fixation occurs. Continued dissection is carried upward and occasionally sacrificing of the external carotid is advisable.

Inadvertent interruption of the carotid arterial stream, with damage to the artery itself, is a complication in the tumor's removal.

If this occurs in such a fashion that direct suturing is not possible, a graft will be necessary.

Anticipating arterial stream interruption, the ipsilateral groin is prepared on all cases for the preparation of autogenous saphenous vein graft. If disruption of the arterial stream occurs and carotid arterial replacement is necessary, an intra-arterial siliconized shunt is immediately inserted to maintain cerebral flow.[5] The saphenous vein graft is then prepared in the usual fashion, threaded over the arterial shunt and sutured in place, with the temporary shunt being removed at the completion of the final anastomosis.[2]

Summary

1. Five cases of carotid body tumors, operated upon by the authors, are reported. In one case, the tumor was bilateral and three of the cases showed a proven hereditary relationship.

2. The characteristics, symptomatology, and indications for operation are reviewed.

3. The technical aspects of carotid body tumor surgery have been illustrated.

Reference

1. Cordell, A. R., Myers, R. T., Hightower, F.: Carotid Body Tumors. *Ann. Surg.* 165: 880-887, 1967.

2. Pyrse-Davis, J.: Some morphologic, histochemical, and chemical observations on chamodectemas and the normal carotid body, including a study of the chromaffin reaction and possible ganglion cell elements. *Cancer,* 17: Jan.-June, 1964.

3. Rush, B. F., Jr.: Current Concepts in the Treatment of Carotid Body Tumors. *Surg.* 52: 679, Oct., 1962.

4. Rush, B. F., Jr.: Familial Bilateral Carotid Body Tumors. *Am. Surg.* 157:633, 1963.

5. Sam, M. J., Silver, C. E., Seideberg, B.: Excision of Carotid Body Tumor Using an Internal Vascular Shunt. *S. G. & O.* Vol. 122, No. 1, 41-44, 1966.

6. Wilson, H.: Carotid Body Tumors. *Surg.* 59:483, March, 1966.

SPECIAL ARTICLES

Report of the Medical Economics Committee

THE Report of the Medical Economics Committee to the House of Delegates is being published in this issue of *The Journal*, at the direction of the Board of Trustees, in order that all KMA members may have the opportunity to understand the proposals prior to action by the Delegates. The Board of Trustees has recommended adoption of this Report.

REPORT NO. 24

Committee on Medical Economics

The new KMA Committee on Medical Economics has held two meetings, on January 7 and April 8, 1971. In keeping with the suggestion of the KMA Executive Committee, it was agreed that a study of foundations for medical care should have first priority during this Associational year.

In addition to the meetings of the Committee, individual members of the Committee have attended special meetings sponsored by the Jefferson County Medical Society and have heard discussions on the foundation concept as represented by the California foundations and by that of Hennepin County, Minnesota. The Chairman and the Executive Director of the Association attended the AMA Socio-Economic Congress, at which one full day was devoted to foundations. The Chairman of the KMA Board of Trustees, physicians representing the Campbell-Kenton, Fayette, and Jefferson County Medical Societies, and a staff member of the KMA attended a two-day Regional Conference on Foundations for Medical Care, which was held in Des Moines, Iowa, on May 7-9.

After careful study and thorough discussion, the Chairman of the Committee on Medical Economics, at the April 14 meeting of the KMA Board of Trustees, held during the KMA Interim Meeting, presented recommendations unanimously approved by his Committee members. They were:

1. That KMA form a Kentucky Foundation for Medical Care as a separate, non-profit, tax-exempt corporation, but with an inter-locking directorate to assure that it would remain under the control of KMA.

a. That the initial efforts of the Foundation should be in the area of peer review, not only of fees, but, more importantly, in the area of quality medical care through the development of norms or standards of medical care in Kentucky and through the careful scrutiny of possible over- and under-utilization.

b. The Foundation should develop minimum standards of coverage for health insurance offered to the citizens of this Commonwealth, and use its influence and good offices to see that sub-standard coverage is upgraded or removed from the market.

c. The Foundation should give advice and encouragement in the development of methods of improving the quality of health care and the better distribution of such care to all citizens, and should work with other allied and interested groups in the area of improvements in the means of financing and providing health care.

d. The Foundation should have such freedom of action and purpose as to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain the medical profession's position of leadership in health matters in Kentucky in keeping with current developments in the legislative, social or medical fields.

2. That the initial Board of Directors of the Foundation be made up of the KMA President, President-Elect, Immediate Past-President, and the Chairman of the KMA Board and five other Trustees, the Chairman and four other members of the KMA Claims and Utilization Review Committee, and the Executive Director of the Association. The terms of office and the election of future Directors should be provided for in the bylaws of the Foundation.

3. That the Board of Directors should have available for its benefit an Advisory Council made up of representatives of business, industry, commercial and pre-paid health insurance, labor and allied providers of health care. Consideration must be given to the advisability, at a later date, of placing such representatives on the Board as voting members.

4. That the Foundation should be authorized to accept funds from business, industry, the commercial and pre-paid health insurance companies, government agencies or other foundations, should they be offered, in an effort to accomplish the aims and purposes of the Foundation.

5. That provision should be made for such staff personnel as may be necessary to implement these recommendations and to carry on the functions and purposes of the Foundation.

6. That the Association transfer to the Foundation those committees and services whose activities and interest fall within the purview of the Foundation's aims and purposes. These would include the Claims and Utilization Review Committee, activities in Comprehensive Health Planning, and Physicians Placement Services, and, possibly, the Postgraduate

Medical Education Fund. The Foundation, too, should assist the Rural Kentucky Medical Scholarship Fund.

It was a pleasure to note that the Board of Trustees, in adopting the report of the Committee on Medical Economics made during the Interim Meeting, requested that it be forwarded to the House of Delegates with a recommendation for approval and asked the Committee to investigate further steps to achieve incorporation of the Foundation as a non-profit, tax-exempt corporation, including the preparation of bylaws. Its adoption is urged.

The material outlined below summarizes the information available on such foundations, the reasons why we feel that KMA should form a foundation, and a few of the specific purposes for which our foundation should initially be designed.

This material is being presented for the information of the membership and the guidance of the delegates.

What Is a Foundation?

A Foundation for Medical Care is an organization of physicians sponsored by a medical society or association. It is a separate and autonomous non-profit, tax-exempt corporation with its own Board of Directors. Members of the medical association may apply for annual membership in the medical care foundation, and upon being accepted, may participate in all programs and activities so long as they abide by the bylaws, rules, and regulations of the Foundation.

A Foundation for Medical Care is concerned with the development and delivery of medical services and the reasonable cost of health care, whether publicly or privately financed. It espouses the concept of free choice of physician and hospital by the patient and the fee-for-service principle.

A Foundation establishes standards for health care based on patterns, or norms, in the area. Through peer review, it preserves and enhances the quality of medical care, guarding against both over-utilization and under-utilization of medical services in and/or out of the hospital.

The Foundation for Medical Care provides a mechanism through which physicians may adequately deal with public and private organizations that provide financing for health care services.

Why Do We Need a Foundation?

There are at least 12 proposals before Congress at the present time which deal with the provision and financing of health care. Although it seems certain that no one of these bills will become law this year, and possibly not next year, it is inevitable that Congress will, sooner or later, vote on a measure for national health insurance—probably one that includes specific features of several different bills already introduced.

The one thing that most all of these bills have in common is the demand for cost and quality control of health care services through peer review.

True "peer" review requires that the work of physicians be reviewed by other physicians, not by bureaucratically appointed representatives of labor, business, government, or the public, who have no qualifications for this task. KMA has an effective peer review mechanism and is, in fact, ahead of most of its sister state organizations in this area. In reality, however, we have only scratched the surface in this relatively new concept.

Regional or district peer review committees must be established across the state, and their members trained in the methods of operation; norms, or standards, of medical care in Kentucky must be established in order that the various committees may be consistent in the review of cases brought to their attention; hospital utilization review must be encouraged and stimulated to reach its peak of effectiveness; it must be convincingly demonstrated to the physicians of Kentucky that peer review is not a punitive mechanism, but, rather, an educational program which will "pin-point" the physician who has not "kept up," who is not practicing good quality medicine, pointing out to him his failings, and encouraging him to take the necessary remedial steps.

To establish and conduct a program such as this requires funds—money that is not available in KMA's budget. Based on the experience of states which have already established foundations, and there are at least 12 of them at this time, money which is not available to a medical association is easily accessible to a foundation—from business, industry, other foundations, HEW, Comprehensive Health Planning, and other agencies.

There are strong indications, furthermore, that medical associations themselves would not be authorized to perform this review function, but that a separate organization (foundation) sponsored by a state association could be given this responsibility.

The demand for experimentation in alternate systems of health care delivery is present and growing stronger every day. The physicians in Kentucky need to keep abreast of these developments, advise and consult with those who promote them, and to make sure that their voice is heard so that they may maintain some control over their own destiny. The foundation concept will permit the physician to continue an active private practice for most of his patients while, at the same time, participating in a pre-paid group coverage program for a segment of the population. We must be in a position to make certain that Health Maintenance Organizations and other experimental programs, do not become financially top-heavy with administrative overhead at the expense of funds allotted for health services. We must guard against those organizational patterns which suggest non-medical control over medical services.

These things an individual physician cannot do for himself. Nor can his medical association legally become involved in many of these areas. A foundation can do these things for him.

For many years KMA has devoted much of its efforts toward improving the health care of the citizens of this Commonwealth. These efforts have been

scattered through the Placement Service, Postgraduate Medical Education, Comprehensive Health Planning, Regional Medical Program liaison, and, more recently, through the Claims and Utilization Review Committee. The Rural Kentucky Medical Scholarship Fund was authorized by the Legislature and funded by the State, but is administered by KMA. All of these programs could be brought under the umbrella of the Foundation with increased coordination and effectiveness.

Health insurance polices sold in this State, in many instances, offer substandard coverage. Physicians should be interested in seeing that this situation is corrected. A foundation should develop minimum standards of coverage for health insurance and use its influence and good offices to see that substandard policies are up-graded or removed from he market.

Who Would Be Members of the Foundation?

Any member of KMA in good standing could apply for membership and, upon acceptance by the Board of Directors, become a member. Membership would be for one year and be renewable by the member, with the approval of the Board. Membership would be voluntary.

Who Would Manage the Foundation?

The Foundation would be managed by a Board of Directors elected in accordance with the bylaws. The Board would be authorized to engage the services of such administrative and secretarial personnel as may be necessary to effectively conduct the affairs of the Foundation.

How Would the Foundation Be Financed?

It is anticipated that membership dues will not be required.

Organizational and development funds should be available from HEW and other governmental agencies. It is expected that industry and the commercial and pre-paid health insurance will contribute to this program on the basis that they have much to gain by the efforts of the Foundation to control health care costs.

Additional funds will be generated from fees paid by third-party carriers who utilize the peer review mechanism.

What Other States Have Foundations?

Georgia, Florida, Illinois, Iowa, Mississippi, Missouri, Colorado, Hawaii, Wyoming, Pennsylvania and Delaware have already formed foundations. Many county medical societies have also developed foundations, including Denver, Minneapolis and about 17 counties in California—some of which are more than 15 years old. From information available at this time, it would appear that at least 40 state associations will have established foundations within the next year. The AMA House of Delegates strongly endorsed the foundation concept at its recent meeting in Atlantic City.

Do All Foundations Function in the Same Manner?

No. The beauty of the foundation concept is that it can be set up to accomplish whatever purpose its members direct.

Some foundations are designed to contract with the state government to administer programs, including the processing of claims and writing of checks. Others have entered contracts to set up prepaid group health organizations.

The primary purpose envisioned for our Foundation is comprehensive and effective peer review so as to insure quality medical care at a reasonable cost.

The Foundation should, however, have such freedom of action and purpose as to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain our position of leadership in health matters in Kentucky in keeping with current developments in the legislative, social or medical fields.

This report on foundations will be presented to the KMA membership, through an article in *The KMA Journal*, and by a special mailing to all county medical society secretaries, KMA officers, trustees, and members of the House of Delegates. Copies of the proposed articles of incorporation and bylaws, which are being prepared by the KMA legal counsel, will serve as an addendum to this report and will appear in the delegates Annual Meeting reports booklet.

Henry B. Asman, M.D., Chairman

Addendum to the Report on Medical Economics

Since the foregoing report was drafted, your Committee has conferred with legal counsel and on his advice has voted to recommend to you that instead of having individual members apply annually for membership in the Foundation and then have that group elect the directors (Trustees) of the Foundation, we broaden the electorate to include the entire membership of the KMA and at the same time simplify the electoral mechanics.

The Board of Trustees of the KMA is, of course, elected by the entire membership through the House of Delegates. It was therefore felt that the plan adopted in Florida whereby the Board of Trustees of the state society constitute the entire membership of the Foundation, would be well adapted to our situation here in Kentucky.

By having the KMA Board of Trustees elect the Board of Trustees of the Foundation, the entire membership of KMA is represented and at the same time the possibility of a divergence in policy and direction is avoided.

We therefore recommend that the attached Articles of Incorporation and Bylaws be approved and that the appropriate officers be authorized to cause the Kentucky Foundation for Medical Care, Inc. to be incorporated.

Bylaws of Kentucky Foundation for Medical Care, Inc.

Chapter 1. **General Provisions.** The corporation shall conduct and carry on its business without profit to itself or its members, or any class thereof. No member of this corporation shall, by reason of membership herein, be or become entitled at any time to receive any assets, property, income, or earnings from the corporation, or to profit therefrom in any manner.

All of the income, revenue, and earnings of the corporation shall be held, used, managed, devoted, expended and applied in the discretion and judgment of the Board of Trustees, to carry out the objects and purposes of the corporation, without profit, direct or indirect, to any member of the corporation as such.

Nothing contained herein shall prohibit the payment of reasonable compensation by the corporation to any member thereof for services rendered.

Chapter 2. **Meetings of Membership.** The annual meeting of the membership shall be held on the date and at the hour of the last (reorganization) meeting of the Board of Trustees of the Kentucky Medical Association held in conjunction with the Annual Meeting of said Association. Notice of that meeting shall constitute notice of the annual meeting of the membership of this corporation and no further notice shall be required.

Special meetings of the membership of this corporation may be called by the President at any time, upon ten days' written notice unless such notice is waived by all members. Special meetings shall be called by the Secretary upon not less than ten days' written notice (unless waived as aforesaid) at the request of a majority of the membership.

Special meetings of the membership may be held anywhere in Jefferson County, Kentucky.

Chapter 3. **Duties of Officers.** The President of the corporation shall preside at all meetings of the membership and all meetings of the Board of Trustees and shall be the chief executive of the corporation. He shall perform such other duties as may, from time to time, be imposed upon him by the Board of Trustees.

The Vice-President (or First Vice-President, if more than one Vice-President is elected by the Board of Trustees) shall preside at meetings of the membership or meetings of the Board of Trustees from which the President is absent and shall perform such other duties as may, from time to time, be imposed upon him by the Board of Trustees. The other Vice-Presidents, if any, shall perform such duties as may be specified by the Board.

The Secretary of the corporation shall be the custodian of all of its records. He shall keep accurate minutes of all meetings of the membership and meetings of the Board of Trustees and shall perform such other duties as may be imposed upon him by the Board.

The Treasurer shall receive, disburse, and account for all of the funds of the corporation under the direction of the Board of Trustees. He shall perform such other duties as may, from time to time, be imposed upon him by the Board, and his books of account shall be audited at least annually.

Chapter 4. **Board of Trustees.** The Board of Trustees of the corporation shall consist of five (5) ex officio members and ten (10) elected members. The five ex officio members shall be: the President, President-Elect, Immediate Past-President, Chairman of the Board and Executive Director of the Kentucky Medical Association. The elected members of the Board of Trustees shall consist of five Trustees of the Kentucky Medical Association and five members of the Kentucky Medical Association at large.

The terms of office of ex officio members of the Board of Trustees shall coincide with their terms of office in the Kentucky Medical Association. Two of the five members elected from among the Trustees of the Kentucky Medical Association shall be elected for terms of three years; two shall be elected for terms of two years; and one shall be elected for a term of one year. In like manner, two of the five members elected from among the membership of the Kentucky Medical Association (at large) shall be elected for terms of three years; two shall be elected for terms of two years; and one shall be elected for a term of one year. Their successors shall each be elected for terms of three years.

No elected member of the Board shall be eligible to serve more than two consecutive terms, except that a member elected to fill a vacancy may be elected to two consecutive terms thereafter.

The Board shall meet on call of the President and at such other times and places as it may, by resolution, fix.

Chapter 5. **Advisory Council.** The Board of Trustees shall have power to appoint an Advisory Council made up of representatives of business, industry, commercial and prepaid health insurance, labor and allied providers of health care, and such other segments of the public as may be desired, the function of which shall be to advise the Board on such matters as may be submitted to the Council by the Board. The precise composition of the Advisory Council, the terms of office of its members and the rules by which its proceedings shall be governed, shall be as prescribed by appropriate resolution of the Board of Trustees.

Chapter 6. The Board of Trustees shall have authority to employ a director and such other agents and employees as may be necessary to carry out the objects of the corporation, and to fix their duties and compensation, including, without limitation, one or more fiscal agents to handle the investment of trust funds or other funds in excess of the corporation's need for working capital. It shall also have power to appoint committees from among the membership of the Kentucky Medical Association, to perform such functions as may be assigned to them.

Chapter 7. **Amendments.** These bylaws may be altered or amended at any time, upon the vote of a majority of the membership at any regular or special meeting thereof.

Certificate of Adoption

I, _____, Secretary of Kentucky Foundation for Medical Care, Inc., do hereby certify that the foregoing bylaws were adopted by the vote of a majority of the membership of said corporation at a meeting held on the _____ day of September, 1971.

WITNESS MY HAND this _____ day of _____, 1971.

Articles of Incorporation of Kentucky Foundation for Medical Care, Inc.

We, the undersigned, in order to organize, form and create a non-stock, tax-exempt, charitable corporation under and pursuant to the provisions of Sections 273.161 to 273.390 of the Kentucky Revised Statutes, do this 5th day of August, 1971, certify the following, to wit:

Article 1. The name of the corporation shall be: Kentucky Foundation for Medical Care, Inc.

Article 2. The principal office and mailing address of the corporation shall, until changed by the Board of Trustees, be: 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Article 3. The name and address of its resident agent for service of process shall be: Robert G. Cox, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Article 4. The duration of the corporation shall be perpetual.

Article 5. The purposes of the corporation shall be:

A. To advance the art of medicine at all levels;

B. To promote the education and training of added numbers of physicians, nurses and other paramedical personnel qualified to minister to the health needs of a growing population;

C. To devise and encourage the use of improved methods of delivery of high quality medical care;

D. To develop minimum standards of coverage for health insurance and to publicize the same with a view towards removing substandard coverage from the market;

E. To develop, organize and operate peer review mechanisms providing objectivity in evaluating the quality of medical care delivered under comprehensive health care programs, the cost thereof and the degree of efficiency by which the program meets the health needs of the population, establishing criteria tending to assure the public of optimum utilization of the available health manpower and facilities and relieving the government of the burden of such review functions;

F. To encourage and coordinate involvement by health professions in comprehensive health planning and area medical program activities;

G. To administer, directly or indirectly, health care programs;

H. To foster freedom of choice among physicians and their patients, freedom from third-party interference with the physician-patient relationship and freedom from third-party interference with the fee-for-service arrangement upon which the physician-patient relationship is based, and

I. To disseminate information to, and educate, the health professions and the general public with respect to the foregoing objectives.

Article 6. No part of the net earnings of the corporation shall inure to the private pecuniary profit or gain of any member, provided, however, that the corporation may compensate a member for services rendered; no substantial part of the activities of the corporation shall be to carry on propaganda or influence legislation or participate in or intervene in (including the publishing or distributing of statements) any political campaign on behalf of any candidate for public office; and in the event of liquidation, all assets of the corporation shall be distributed to one or more charitable organizations (within the meaning of Section 501(c)(3), Internal Revenue Code of 1954) to be selected by the Board of Trustees.

Article 7. The powers of the corporation shall be to do all manner of things permissible under the laws of this Commonwealth in the furtherance of the purposes stated in Article 5 hereof.

Article 8. The corporation shall be governed by a board of directors which shall be known as the Board of Trustees, composed of not less than five (5) nor more than twenty (20) members, to be elected annually by the membership. The first Board of Trustees shall be composed of the incorporators, who shall serve until the first meeting of the membership at which a Board shall be elected, and the annual election of Trustees shall be held on the anniversary of that date, unless otherwise provided in the bylaws.

The Board shall elect, from its membership, a President, a Secretary, a Treasurer, and as many Vice-Presidents as may be desired. Provided, however, that the offices of Secretary and Treasurer may be held by one person.

Officers shall be elected for terms of one year and until their successors are elected and qualify. Trustees may be elected for terms of one, two or three years, and shall serve until their successors are elected and qualify.

At all meetings of the Board of Trustees, a quorum shall consist of a majority of the full membership of the Board.

Article 9. The members of the Board of Trustees of the Kentucky Medical Association, as from time to time constituted, and the Executive Director of said Association, shall comprise the entire membership of the corporation. Any person who ceases to hold such office shall cease to be a member of this corporation.

At all meetings of the membership, a majority of the total membership shall constitute a quorum.

IN WITNESS WHEREOF, we have hereunto affixed our signatures, the day and date first hereinabove mentioned.

Acknowledgement

State of Kentucky

County of Jefferson

I, _____, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing Articles of Incorporation of Kentucky Foundation for Medical Care, Inc. were produced to me by _____, all known to me personally, who acknowledged that they executed the same for the purposes stated therein.

This _____ day of September, 1971.

Notary Public

My commission expires _____

THIS INSTRUMENT DRAFTED BY:
E. GAINES DAVIS, JR.
ATTORNEY AT LAW
P. O. BOX 457
FRANKFORT, KY.

This report was reviewed by the Board of Trustees on August 5, 1971.

BOARD ACTION: Approved.



Health Care Costs: A Paradox

MEDICINE, as well as the public, is interested in and concerned with the escalating costs of health care, and has been for years. Statistics have shown that hospital care has been the major factor in this escalation, and a large measure of the responsibility for this has been placed on the shoulders of the physician, since we admit the patient to the hospital and determine the length of his stay.

We accepted this challenge and endeavored to strengthen admission policies, the work of the audit committees and the utilization committee. We have established a peer review mechanism to guard against both over- and under-utilization of health facilities and personnel —both of which increase cost. And we joined with others to encourage the commercial and pre-paid health insurance companies to market policies which cover ambulatory and out-patient services, so as to reduce the need for hospitalization.

That our efforts have not, so far, been successful is obvious. It would seem, however, that we have created a paradox!

In a recent issue of *American Medical News,* a release from the American Hospital Association stated that 20 per cent of the hospital beds in the United States are empty on an average day, costing 10 million dollars a day or 3.6 billion per year, since it costs two-thirds as much to maintain an unoccupied bed as it does one that is in use.

In the same issue of *American Medical News,* however, there was a lengthy article reporting that the Blue Cross-Blue Shield plans had experienced a 51 million dollar deficit in 1970 in the program underwritten for federal employees. More than 60 per cent of all eligible federal employees and their families (five million plus) are enrolled in FEP.

Out-patient x-ray and laboratory services became basic benefits under this program in 1968. These out-patient services now account for 50 per cent of the claims volume and nearly 25 per cent of the dollars paid out in benefits.

Out-patient x-ray claims increased from 538,000 in 1968 to 870,000 in 1970 with benefits totalling 20.6 million dollars. Similarly, laboratory claims went from 532,000 in 1968 to 1,200,000 just two years later with 23.6 million dollars paid in claims.

These statistics have been called to the attention of the medical profession with the plea that we do everything within our power to reverse this trend. The startling figures should make clear to everyone, it seems to us, that health insurance coverage for ambulatory and out-patient services is not the entire answer; that such coverage does not reduce hospital costs but, by providing coverage for more services, actually increases the total health care cost.

Recognizing the pressure upon physicians to practice "defensive" medicine in the light of the ever-increasing threat of malpractice litigation, it is, nevertheless, greatly in our own interest to increase our efforts to reduce the costs of health care. This we are endeavoring to do by increasing the scope of our peer review activities.

The proponents of compulsory nationalized health insurance for everyone repeatedly point out high utilization and high costs as reasons for passing their proposals. That, too, seems paradoxical when you consider the Blue Cross-Blue Shield experience with "first-dollar" coverage in the FEP. Imagine what the cost would be for 200 million persons instead of five million!

That is—unless the bureaucrats intend to control these items by dictating which and how many laboratory tests may be run and who and what may be x-rayed.

Maybe they will also decide who can sue the physician—and for how much!

HENRY B. ASMAN, M.D.

Recurring Opportunity

THE 1971 Convention of the Southern Medical Association is scheduled for October 31 thru November 4 at the Fontainebleau Hotel, Miami Beach, Florida.

We who have attended these meetings more or less regularly for many years always look forward to a pleasant and profitable respite whenever and wherever the Southern meets; those who have not formed such a habit have something stimulating in store.

Next to the annual meeting of the AMA, the Southern has the greatest variety of scientific material to offer. The 21 general and specialty sections compete with each other for the excellence of their program. Furthermore, the separate meetings are relatively small—one may hear clearly and is encouraged to discuss and ask questions in a most informal manner. Often our most effective method of learning is from casual exchange of ideas and not from attention to formal lectures.

The social features of the Southern Medical Convention have always been attractive, especially to the wives. Since the entire meeting is to be conducted in the hotel where many of the physicians are housed, there is a special advantage over having to trek daily to the Convention Hall—and facilities for recreation —bathing, fishing, golf, shopping—are always near at hand.

There is the additional incentive for those who planned, or may yet plan, to take the post-Convention tour to Greece and the Greek Islands—a comparatively small group, close and friendly associations, and the exhilarating experience of travel. The SMA, with its membership of nearly 20,000 from the 17 southern states, is our own regional society. After 65 years of faithful service, it is better than ever and has much to offer us.

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

KMA Annual Meeting To Offer Many Special Features

Scientific sessions featuring Kentucky physicians and prominent guest speakers from throughout the country will highlight the 1971 Annual Meeting to be held September 21-23 at the Convention Center in Louisville.

Presentations will deal with such subjects as surgery, hypertension, drug abuse, cardiology, aids to the diagnosis of cancer, and many others. An "Ask the Expert" session, consisting of informal discussion of 17 topics, will be held on Wednesday afternoon.

Physician-Astronaut Story Musgrave, M.D., will be the guest speaker at the President's Luncheon on Wednesday, September 22, at 11:50. To be held in the Flag Room of the Kentucky Hotel, the Luncheon will also feature the presentation of KMA's three top awards and the installation of the new KMA President, John S. Harter, M. D., Louisville.

A large variety of technical and scientific exhibits will be on display during the three-day session. Members will have an opportunity to view many products of interest during each general and specialty session.

Other highlights of this year's Annual Meeting include two sessions of the KMA House of Delegates, an orientation program for new KMA members, the 49th Annual Convention of the Women's Auxiliary to KMA, the annual KEMPAC seminar, meetings of the 16 specialty groups, and alumni reunions for 11 University of Louisville School of Medicine classes.

KMA President Comments On Wage Price Freeze

"There has been considerable discussion in recent days of the wage and price freeze order by President Nixon which has to last at least until November 12.

"I wanted to take this opportunity to remind all members of KMA that we understand this freeze *does apply* to physicians' fees. We want to cooperate in every way possible and be certain that our members are aware of this policy, to eliminate any misunderstanding.

"By utilizing the *American Medical News,* I feel certain that AMA will develop a detailed explanation of how President Nixon's plan will affect our medical practice. We will also attempt to keep you informed from State Association Headquarters whenever additional information is available."

John C. Quertermous, M.D.
KMA President

Education Survey Endorsed By Board Of Trustees

The KMA Board of Trustees, on recommendation of the Medical Education Committee, has endorsed a survey of the continuing education practices, interests, and needs of Kentucky physicians. The survey is being conducted with the support and participation of the Ohio Valley Regional Medical Program and the University of Kentucky Office of Continuing Education.

All members will receive in the mail a questionnaire on the above subject, with a return, postage-paid envelope and a covering letter by John C. Quertermous, M.D., President of KMA, during the last week of September. Completing the questionnaire will take approximately ten minutes.

All physicians are urged to complete the form promptly and return it to KMA Headquarters. This will reduce the cost and effort involved and, very importantly, will make the study more valid and of more use to KMA, specialty societies, the two medical center postgraduate medical education offices, and others interested in continuing education for physicians in Kentucky.

An analysis of the findings will be reported in *The Journal of the Kentucky Medical Association* sometime later in the year.

Those who attend the KMA Annual Meeting in Louisville will find questionnaires available to them at the Convention Center.

The subscription dinner of the House of Delegates (Oak Room, Seelbach Hotel) will not be held this year. It should not have been listed in the "1971 Annual Meeting Program Summary" carried in the August *Journal.*

Hospital "On-Call" Rosters Urged By KMA Board

The KMA Board of Trustees, upon recommendation of the KMA Hospital Committee, has urged all county medical societies and has asked the Kentucky Hospital Association to urge all Kentucky hospitals to establish and maintain an on-call roster.

The action was taken in an effort to assure proper hospital coverage in Kentucky without the necessity of requiring the physical presence of a physician in a hospital on a 24 hour basis.

A bill requiring an M.D. to be on duty 24 hours a day in all hospitals with 50 beds or more was introduced, and subsequently defeated, during the last session of the Kentucky General Assembly.

Drug Abuse Symposium Planned For Medical Professionals

A Medical Professional Drug Abuse Symposium will be held September 29-30 at the University of Louisville Health Sciences Center.

Sponsored jointly by KMA, the Jefferson County Medical Society, the University of Louisville School of Medicine, and the Drug Abuse Center, the symposium is designed exclusively for the medical profession.

The program planned is as follows:

Wednesday, September 29

8:30 Registration
9:00 Welcome
9:15 "Psychoactive Drugs" — Richard Smith, Ph.D.
10:15 "Effects of Drugs on Organ Systems" — Thomas Darby, Ph.D.
11:15 Workshops
12:00 Lunch
1:30 "Local Medical Organizations" (and what they can do) — Frank Bechtel, M.D.
2:30 "Local Pharmacists Organizations" (and what they can do) — Robert L. Barnett, R.Ph.
3:30 Workshops
7:00 Dinner/"Family Physician" — William Stodghill, M.D.

Thursday, September 30

9:00 "Community Based Treatment" — Alex M. Panio, Ph.D.
10:00 "The Existence of Underlying Psychopathology and Its Consequences in Treatment"— David Brown, M.D.
11:00 Workshops
12:00 Lunch
1:30 "Treatment Models" — Willard Mainord, Ph.D.
2:30 "The Family Unit as Patient" — John R. Hollon, Executive Director, Drug Abuse Center, Louisville
3:30 Plenary Panel Presentation
4:30 Workshops

Registration will be held in the lobby of the Library and Commons Building, U. of L. Health Sciences Center. There will be a registration fee of $15.00 which will include dinner on Wednesday evening.

Glaucoma Screening Planned For KMA Annual Meeting

A Glaucoma Screening Booth, sponsored by the Kentucky Society for the Prevention of Blindness, is scheduled for this year's KMA Annual Meeting. Intraocular pressures will be checked free to anyone in attendance, and screenees with suspiciously high pressures will be referred to an ophthalmologist for more definitive evaluation. The attending ophthalmologist will also instruct any physician in the technique of tonometry.

Glaucoma is second only to cataracts as a leading cause of blindness, according to C. Dwight Townes, M.D., Louisville, Medical Advisory Chairman of the Kentucky Society. "Current thinking encourages the family physician and internist to include tonometry as an integral part of every physical examination on patients over 35."

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Medical Groups Plan Meetings During KMA Annual Session

Several miscellaneous meetings have been planned before and during the KMA Annual Session. The time, date, and place of meetings scheduled at press time are listed below.

Sunday, September 19

12:30 p.m. KMA Board of Trustees Luncheon Meeting, Oak Room, Seelbach Hotel

Monday, September 20

8:30 a.m. Orientation Program, new KMA members, Rathskeller, Seelbach Hotel

9:00 a.m. KMA House of Delegates Meeting, Louisville Royal Room, Seelbach Hotel

12:30 p.m. Reference Committee Chairmen Luncheon, Room 343, Seelbach Hotel

2:00 p.m. Six Reference Committee Meetings, Louisville Royal Room, Gold Room, Colonial Room, Oriental Room, Junior Ballroom, Parlor A, Seelbach Hotel

6:00 p.m. KEMPAC Reception, Seminar, and Banquet, Canterbury Room, Executive Inn

Tuesday, September 21

10:30 a.m. Executive Committee, Kentucky Chapter, American College of Pediatrics Breakfast and Meeting, Gold Room, Seelbach Hotel

12:00 noon KMA Board of Trustees Luncheon Meeting, Oriental Room, Seelbach Hotel

12:00 noon Kentucky OB-GYN Society Luncheon (members and guests only), Old House

12:00 noon Board of Governors, University of Louisville School of Medicine Alumni Association Luncheon, Pendennis Club

12:15 p.m. Ohio Valley Proctologic Society Luncheon, Colonial Room, Seelbach Hotel

5:30 p.m. Kentucky Society of Anesthesiology Social Hour, Oriental Room, Seelbach Hotel

5:30 p.m. KMA-KMA Woman's Auxiliary Reception, Oak Room, Seelbach Hotel

5:30 p.m. Alpha Nu Chapter of Alpha Kappa Kappa Social Hour, location to be announced at Annual Meeting

6:00 p.m. Kentucky Chapter, American College of Chest Physicians and Kentucky Thoracic Society Dinner, Dover-Dolphin Room, Executive Inn

6:00 p.m. Kentucky Orthopaedic Society Social Hour and Dinner, Pendennis Club

Wednesday, September 22

7:30 a.m. Kentucky Academy of General Practice Insurance Commission Breakfast Meeting, Colonial Room, Seelbach Hotel

9:00 a.m. State Board of Health Meeting, Gold Room, Seelbach Hotel

(Continued on next page)

The Association of American Physicians and Surgeons, Inc.

Presents

The Honorable J. Enoch Powell

Former Minister of Health
Great Britain (1960-1963)

At the Annual AAPS Meeting

October 7, 8 and 9, 1971

Colony Motor Hotel, Clayton, Mo.
(Suburb of St. Louis, Mo.)

"Mr. Powell tried for three years to make the British National Health Service work. He admits he failed. In St. Louis, he will explore the consequences of transforming British doctors into state employees and contractors. He will show these consequences to be neither accidental nor transitory, and not easily remedied . . . will examine the little understood connection between medicine and politics. He bases his message, a timely one for all Americans, on experience and fact . . . not theory." For further information, contact: Association of American Physicians and Surgeons, Inc., 230 North Michigan Ave., Suite 1000, Chicago, Illinois 60601; phone (312) 782-5669.

KMA And AMA To Co-Sponsor Medical Science Seminars

KMA, in cooperation with AMA, is co-sponsoring a program of seminars and a lecture in the medical sciences to be given at four Kentucky universities during 1971-72. The AMA Council on Foods and Nutrition initiated this program in 1964.

The purpose of the lecture is to inform students and faculty of recent developments and to stimulate interest in the medical sciences. The lecturers will be on campus for the entire day to give undergraduate or graduate seminars and also to meet informally with students and faculty interested in discussing careers in medicine and related fields.

I. Frank Tullis, M.D., Director of the Clinical Research Center at the University of Tennessee, will speak on "Obesity—An Incurable Disease?" at Western Kentucky University on October 20 and at Murray State University on October 21.

Paul Zee, M.D., Chief of Nutrition and Metabolism at St. Jude Children's Research Hospital in Memphis, will speak on "Nutrition of the 'Haves' and 'Have Nots'" at Berea College on November 16, and at Morehead State University on April 23, 1972.

Miscellaneous Meetings

(Continued from page 708)

11:50 a.m. President's Luncheon, Flag Room, Kentucky Hotel

5.00 p.m. KMA Board of Trustees Meeting, Oriental Room, Seelbach Hotel

6:00 p.m. KMA Board of Trustees Dinner, Junior Ballroom, Seelbach Hotel

7:00 p.m. KMA House of Delegates Meeting, Louisville Royal Room, Seelbach Hotel

Thursday, September 23

11:00 a.m. Kentucky Chapter, American College of Surgeons Luncheon Meeting, Oriental Room, Seelbach Hotel

12:00 noon KMA Board of Trustees Luncheon, Junior Ballroom, Seelbach Hotel

12:00 noon Kentucky Industrial Medical Association Luncheon, Parlor A, Kentucky Hotel

5:30 p.m. Kentucky Psychiatric Association Social Hour and Dinner, Holiday Inn Midtown

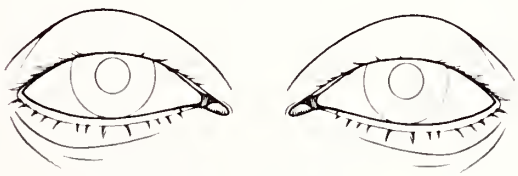
Dr. Limper Resigns Post, Successor Sought

Margaret A. Limper, M.D., Louisville, has submitted her resignation as Medical Director of the Commission for Handicapped Children, the official state agency for medical care of physically handicapped children. The Commission's Board has accepted her resignation, but has requested that she continue her duties until a successor can be appointed.

The position calls for a Board-certified pediatrician or a physician with a Master's Degree in Public Health. Interested persons so qualified may apply to the President of the Board, Commission for Handicapped Children, 1405 East Burnett Avenue, Louisville, Kentucky 40217.

Ronald E. Falls, M.D., a specialist in diagnostic radiology, has joined the faculty of the University of Louisville School of Medicine. He graduated from the University of Louisville School of Medicine, interned at Louisville General Hospital, and served his residency at Louisville General Hospital and Duke University Hospital, Durham, N.C.

KENTUCKY SOCIETY FOR THE PREVENTION OF BLINDNESS, Inc.



HAVE THOSE "BABY BLUES"
(or browns or hazels)
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Remember: Glaucoma is difficult to detect in the first stages. Glaucoma can usually be controlled if caught early. Two per cent of persons over 35 are Glaucoma victims.

FREE GLAUCOMA SCREENING in Scientific Exhibits area.

AMA Annual Meeting Attended By 39 Kentucky Physicians

Thirty-nine physicians represented Kentucky at the 120th Annual Convention of the American Medical Association, held June 20-24, in Atlantic City.

The AMA registration records show that the following Kentucky physicians attended the Convention:

LOUISVILLE

Mohammad Atik, M.D.
William W. Atkinson, M.D.
John T. Bate, M.D.
Charles G. Bryant, M.D.
Roy K. Diamond, M.D.
Malcolm A. Galen, M.D.
Hoyt D. Gardner, M.D.
J. Thomas Giannini, M.D.
J. Duffy Hancock, M.D.
John S. Harter, M.D.
William K. Keller, M.D.
Robert C. Long, M.D.
Robert W. Lykins, M.D.
John E. Ryan, M.D.
N. A. Saliba, M.D.
Carroll L. Witten, M.D.

LEXINGTON

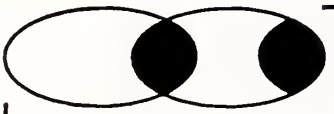
Lester R. Bryant, M.D.
Vester A. Jackson, M.D.
Horace A. Norrell, Jr., M.D.
Nicholas J. Pisacano, M.D.
Lloyd F. Redick, M.D.
Kenette K. Sohmer, M.D.
David B. Stevens, M.D.
J. Kent Trinkle, M.D.
L. E. Wallace, M.D.
Jonathan D. Wirtschafter, M.D.

OTHER CITIES

C. M. Blanton, M.D., Paducah
George F. Brockman, M.D., Greenville
L. Terry Chappell, M.D., Evarts
Peter D. Ganime, M.D., Fort Campbell
Daryl P. Harvey, M.D., Glasgow
Kenneth P. Haywood, M.D., Madisonville
Arthur J. Nash, M.D., Jenkins
Charles G. Noss, M.D., Stanton
John C. Quertermous, M.D., Murray
Charles C. Rutledge, M.D., Hazard
W. M. Savage, M.D., Maysville
Garnett J. Sweeney, M.D., Liberty
Ira F. Wheeler, M.D., Oneida

John H. Doyle, M.D., Louisville, has been elected a trustee of the Morris Animal Foundation, a Denver-based organization which sponsors studies of the health problems of animals. A graduate of the University of Louisville School of Medicine, Doctor Doyle has been engaged in the private practice of pediatrics since 1958.

David S. Swan, M.D., has joined the faculty of the University of Kentucky College of Medicine. A specialist in obstetrics and gynecology, Doctor Swan graduated from the Wayne State University School of Medicine, Detroit, interned at Philadelphia General Hospital, and served his residency at University Hospital Case Western Reserve.



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Professional Bldg. East, 3101 Breckinridge Lane
ST. MATTHEWS 313 Wallace Center
108 McArthur Drive
NEW ALBANY Professional Arts Bldg., 1919 State Street
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OWENSBORO Doctors Bldg., 1001 Center Street

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NEWS ITEMS

The National Paraplegia Foundation has announced a $10,000 award to be granted in the Spring of 1972 to the scientist of the world making the greatest contribution toward the cure of paraplegia. Questions regarding the conduct of the award program should be addressed to the National Paraplegia Foundation, 333 N. Michigan Avenue, Chicago, Illinois 60601.

The Board of Medical Examiners of Florida may issue licenses by endorsement to practice medicine and surgery in Florida, effective September 1, according to the Florida Medical Association. An amendment to the Medical Practice Act of Florida, enacted by the 1971 legislature, allows issuance of licenses by endorsement to those M.D.'s who have been certified by the National Board of Medical Examiners or the Federation Licensure Examination within a period of eight years preceding the date of application for licensure by endorsement.

Gerald F. Sturgeon, M.D., is now practicing pediatrics in Louisville in association with Glenn R. Stoutt, Jr., M.D. Doctor Sturgeon graduated from the University of Kentucky College of Medicine, interned at St. Joseph Infirmary, and served his residency at Louisville Childrens Hospital.

AMA and The President's Committee on Employment of the Handicapped have announced that nominations for the 1971 "Physicians Award" are now open. The award is presented each year to a physician "who has made outstanding contributions to the welfare and employment of the handicapped workers of our country." Further information can be obtained at the KMA Headquarters Office or by writing: Chairman, Medical Committee, President's Committee on Employment of the Handicapped, Washington, D. C., 20210.

Beverly Ann Smith, M.D., has joined the staff of the University of Kentucky College of Medicine. A member of the Department of Obstetrics and Gynecology, Doctor Smith is a graduate of the University of Tennessee College of Medicine. She interned at the Baptist Memorial Hospital in Memphis and served her residency at the Mayo Clinic, Rochester, Minn., and the Bethesda Hospital, Cincinnati.

Richard F. Park, M.D., is now practicing in association with B. H. Wells, M.D. In family practice in Corbin, Doctor Park attended the University of Kentucky College of Medicine and interned at the Duval Medical Center in Jacksonville, Florida.



From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 15-68. This 21 year old single black, female gr. 3, para. 2, had a history of amenorrhea for one month when seen by a private physician. Physical examination did not confirm pregnancy.

The physician was called one month later by the patient's mother, requesting he make a house call to see the patient who was flooding. She was told this couldn't be properly treated at home, but that the physician would see her at his office. She never arrived and it was assumed she sought treatment elsewhere.

He received another urgent call at 10:00 a.m., July 14, 1968, from the patient's mother. Upon making the home call one and a half hours later, he found the patient in great distress, complaining of dyspnea and chest pain. He remembered the office call two days earlier and checked to see if there was vaginal bleeding. There were a few clots on the sanitary napkin. Her mucous membranes appeared pale, abdomen was not distended, BP was 60/40, pulse 120/min. The impression was shock due to hemorrhage. The mother was advised to take the patient to the hospital, as her condition was critical.

Arrangements were made; however, there was a delay in getting her to the hospital and she expired within five minutes after arriving.

A pelvic examination on the deceased revealed a multiparous cervix with no evidence of recent trauma. The cervix was dilated approximately 1 cm. There were a few clots and what was described as placental tissue in the vagina. The physician felt she was about two months pregnant and had a miscarriage with severe hemorrhage. There was no autopsy.

Comments

The Committee considered this case an obstetrical preventable one, with the preventable factors on the part of the patient and her family. Again, complete information is not available to the Committee for a proper interpretation of the cause of this death.

The patient did report to a physician early in pregnancy. Although a diagnosis of pregnancy could not be confirmed, it was evidently suspected.

The patient or her mother did summons a doctor when she appeared to be bleeding heavily. However, the patient did not report for treatment either in the physician's office or in the hospital. It was assumed she sought treatment elsewhere.

At the time the physician made second contact with the patient at a house call approximately one month later, the patient was in acute distress. According to the description, she was in shock with a blood pressure of 60/40 and a pulse of 120. Although profuse blood loss is not described as being evident at this time, by the time she arrived in the hospital, the patient was in such critical condition that she died.

It is presumed that the death was due to hemorrhage. The possibilities are that she had excessive blood loss from a spontaneous or induced abortion. Septic factors in an induced abortion could have contributed to her state. It is also possible in this case that this patient was suffering from an ectopic pregnancy with hemoperitoneum, and what was interpreted as placental tissue could have been a decidual cast. The ectopic pregnancy that ruptured could have produced her symptoms of chest pain and dyspnea, together with shock. It is unfortunate that delay in treatment occurred, for her life could have been saved with proper diagnosis and treatment.



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* These recommendations are based on a *one cup portion* when prepared according to directions on the label. If milk is used in the preparation, use part of your daily requirement.

Exchange Substitution for 1 Bread and ½ Fat

Tomato
Tomato, Bisque of
Tomato Rice, Old Fashioned

Exchange Substitution for ½ Bread and ½ Fat

Asparagus, Cream of

Exchange Substitution for 1 Meat and 1½ Bread

Hot Dog Bean
Split Pea with Ham

Exchange Substitution for ¼ Meat and ½ Bread

Chicken Gumbo
Chicken Noodle

Campbell's Soups are appetizing and enjoyable and, because of the many varieties available, offer your diabetic patients the opportunity to plan and enjoy more interesting and appealing meals.

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The Unwanted Child & Birth Control

Ten thousand battered children- a growing medical problem?

In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the series as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influence of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

Searle contributions to the science of contraception

BOTH AVAILABLE IN 21- AND 28-PILL SCHEDULES

Ovulen® · Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg /mestranol 0 1 mg

Each white tablet contains: ethynodiol diacetate 1 mg /ethinyl estradiol 50 mcg

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients

Demulen... for its low estrogen and Searle's progestin—or Ovulen... with its wide physician and patient acceptance. Both offer almost complete contraceptive effectiveness and a low incidence of side effects. Both with a choice of pill-taking schedules... simple "Sunday-starting" and patient-proof Compack® tablet dispensers.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4 4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967 **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease: A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

1A5

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For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

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hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.

Brief Summary of Prescribing Information—9-9/22/69.
For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

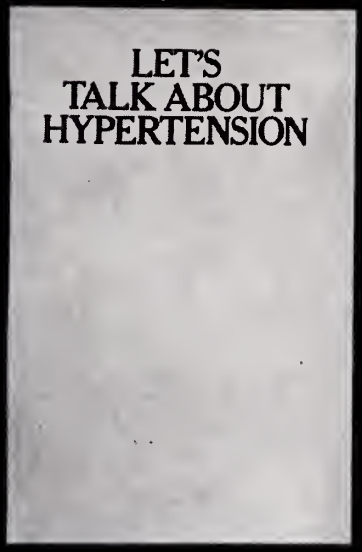
Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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My guide book from Dr. Fox...



Following my Doctor's good advice...



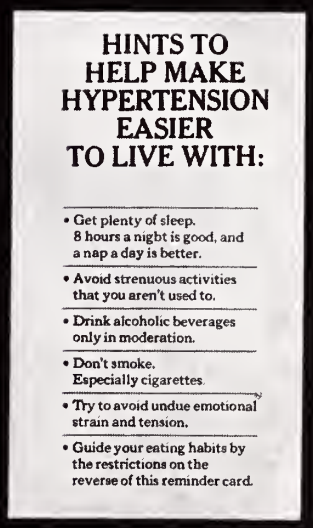
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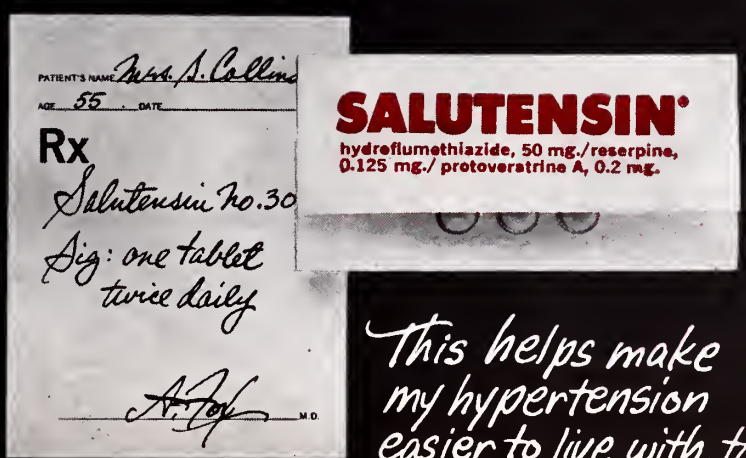
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This helps make my hypertension easier to live with, too.

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Depression is a 24-hour-a-day problem... and disturbed sleep is often its nocturnal expression. In fact, such disturbance may be a key symptom in establishing the diagnosis of depression.



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ELAVIL® HCl

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TABLETS: 10 mg, 25 mg, and 50 mg
INJECTION: 10 mg/cc

When depression is serious enough to warrant medication, ELAVIL HCl may prove extremely helpful. Unlike psychic energizers or agents that merely elevate mood, ELAVIL HCl embodies a mild antianxiety action which manifests itself even before the fundamental antidepressant activity of the drug becomes evident. Daytime drowsiness occurs in some patients, usually within the first few days of therapy.

NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible. Should not be given to patients who have received an MAOI within two weeks.

Contraindications: Known hypersensitivity. Should not be given concomitantly with or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor. Then initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with narrow-angle glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: When used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase, and paranoid delusions, with or without associated hostility, may be exaggerated; in any of these circumstances, it may be advisable to reduce the dose of amitriptyline HCl, or to use a major tranquilizing drug, such as perphenazine, concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-cc vials containing per cc: 10 mg amitriptyline HCl, 44 mg dextrose, and 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

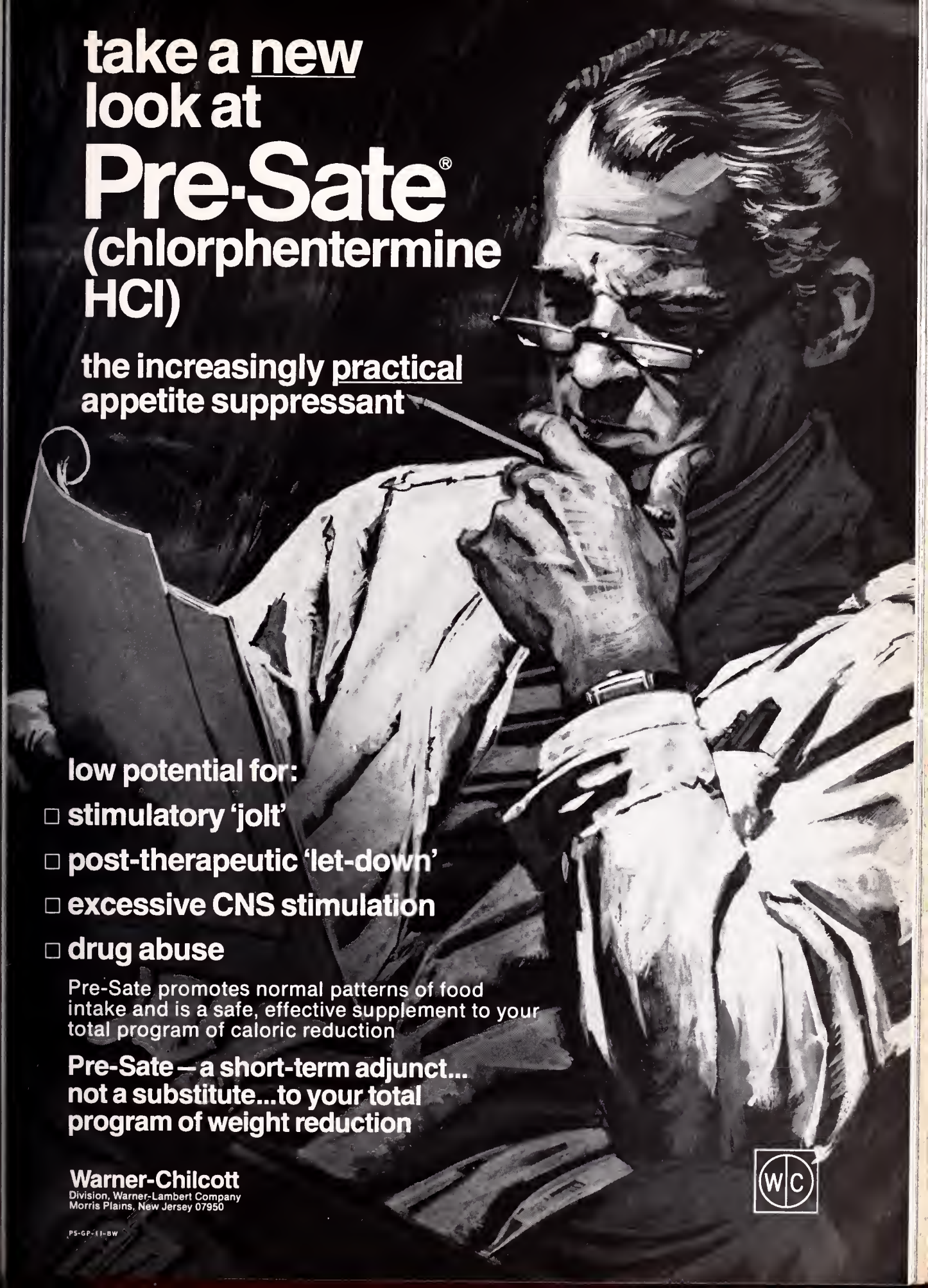
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


take a new look at
Pre-Sate®
(chlorphentermine HCl)
the increasingly practical appetite suppressant
low potential for:
□ stimulatory 'jolt'
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Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction
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1971 Annual Meeting

September 21-23

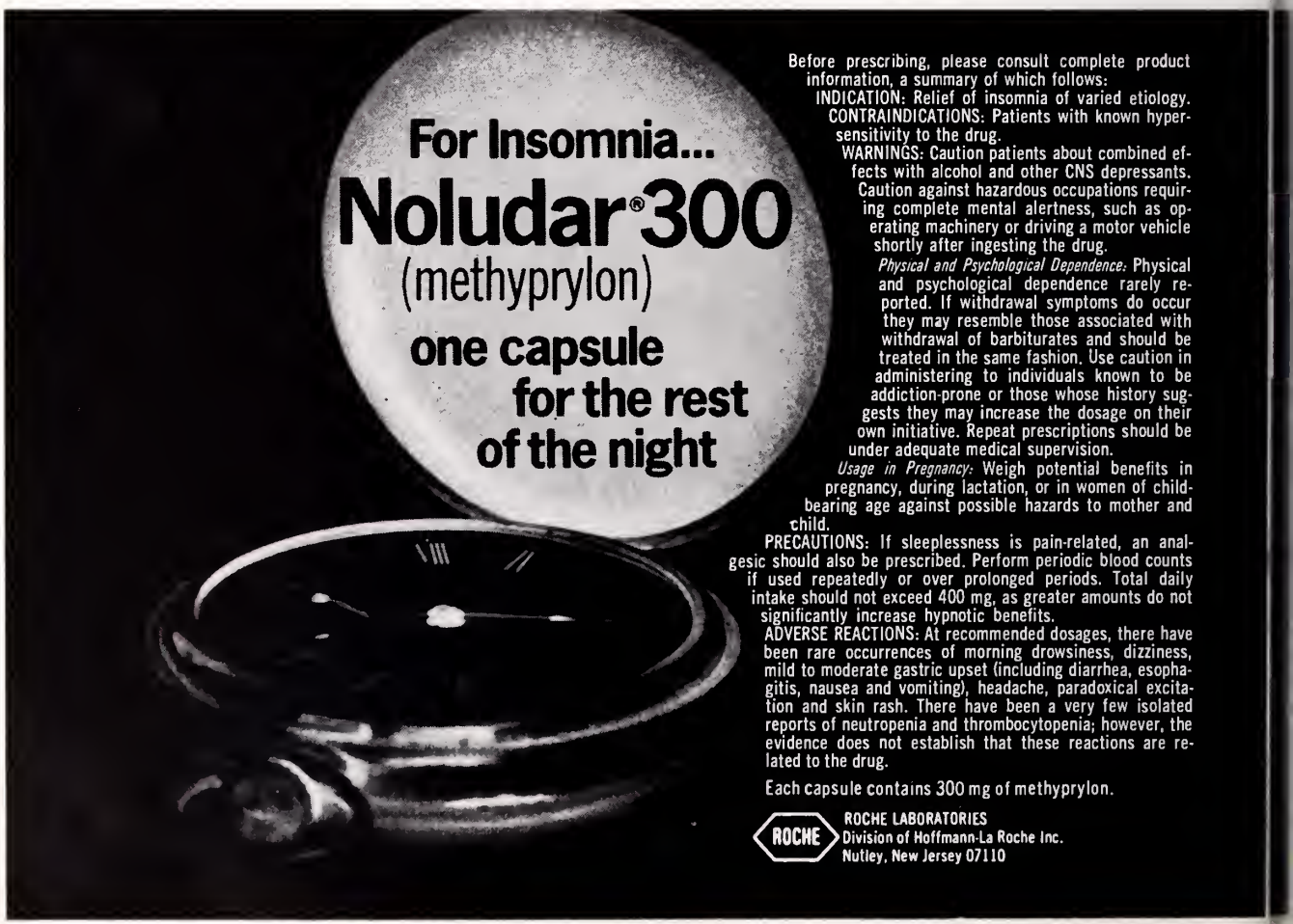
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phenobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
(warning: may be habit forming)			

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

A. H. ROBINS COMPANY, RICHMOND, VIRGINIA 23220

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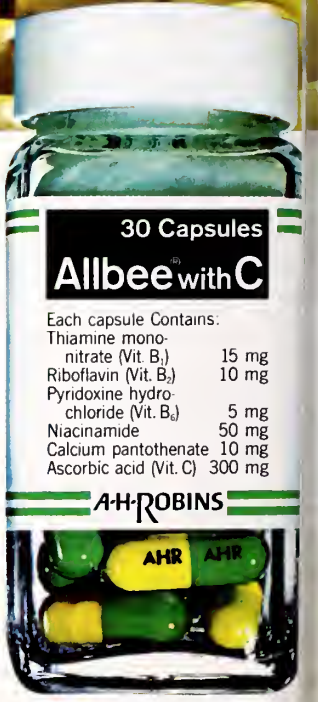


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Tepanil® Ten-tab®

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When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Controindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Worning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U.S. PATENT NO. 3,021,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriasclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastraintestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Q103 2/71

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

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gastritis



when G-I symptoms demand a potent synthetic anticholinergic

move up to "the Robinul response"

In treating hypersecretion and hypermotility associated with gastritis are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent anticholinergic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of gastric hypersecretion, making it a highly effective agent in gastritis and other upper G-I conditions associated with hypersecretion and hypermotility. Because Robinul Forte exerts a profound antispasmodic action, it is also useful in the treatment of lower G-I disorders, such as functional bowel distress and spastic and irritable colon. If the patient has a "one tract mind" concerning his condition, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2mg. Forte (glycopyrrolate)

INDICATIONS Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue tablets engraved AHR/2 in bottles of 100 and 500.

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THERAGRAN is often indicated as a high potency vitamin formula pre- and postoperatively, and in many patients with: arthritis, diabetes, pancreatitis, infectious disease, hepatic disease, cardiac disease, degenerative disease, osteoporosis, alcoholism, dermatologic conditions, psychiatric disorders, malabsorption syndrome, peptic ulcer, ulcerative colitis, other gastrointestinal disease, and during the menopause. Also available with minerals as THERAGRAN-M.
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THERAGRAN TABLETS AND LIQUID CONTAIN 600% OF THE MINIMUM DAILY ADULT REQUIREMENT OF VITAMIN C.
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if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
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Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

spring peeper (tree frog, *Hyla crucifer*): his small amphibian can expand ts throat membrane with air until it is wice the size of its head.

anxiety: a time bomb

Unless "defused," anxiety may build up to an intensity that can overwhelm the patient's inner defenses. Also, in one weakened by chronic illness or surgery, excessive anxiety may provoke or aggravate symptoms and interfere with recovery.

The antianxiety action of Librium (chlordiazepoxide HCl)—used adjunctively or alone—has demonstrated clinical usefulness in many fields of medical practice where anxiety complicates the patient's condition.



Librium®
(chlordiazepoxide HCl) 5-mg, 10-mg, 25-mg capsules up to 100 mg daily for severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

ROCHE

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Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

VOLUME 69 OCTOBER 1971 NUMBER 10

The Journal of The KENTUCKY Medical Association

COLLEGE OF PHYSICIANS
OF PHILADELPHIA
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Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

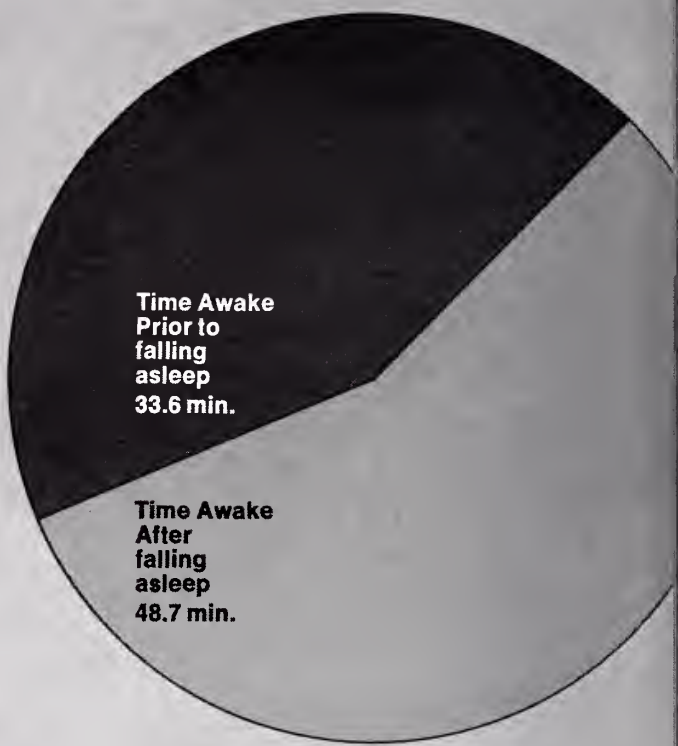
These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electro-encephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

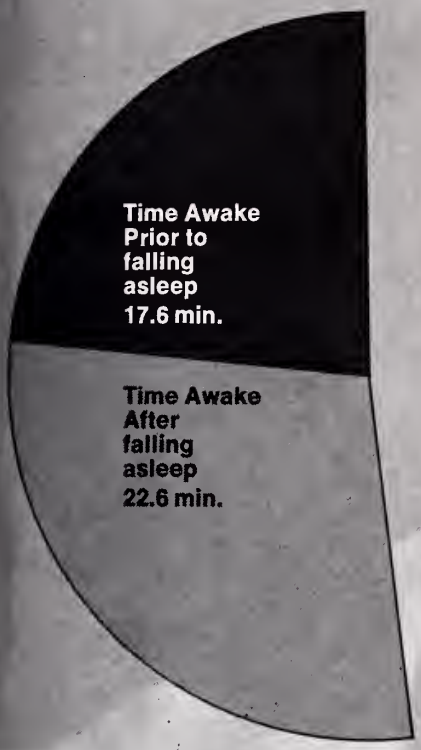
Before Dalmane (flurazepam HCl)



Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

ınd slept through the night

On
Dalmane
(flurazepam HCl)



rage sleep laboratory measurements in cited studies

ımeter	Before Dalmane	On Dalmane
e required to fall asleep	33.6 min.	17.6 min.
e time after onset of sleep	48.7 min.	22.6 min.
ıber of wakeful periods after ıset of sleep	12.2	8.4
l sleep time	420.0 min.	447.5 min.
l sleep percent	88.6	94.5

inical effectiveness as oven in the sleep laboratory

Dalmane®
lurazepam HCl)

e 30-mg capsule h.s.—usual adult dosage.
e 15-mg capsule h.s.—initial dosage for erly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

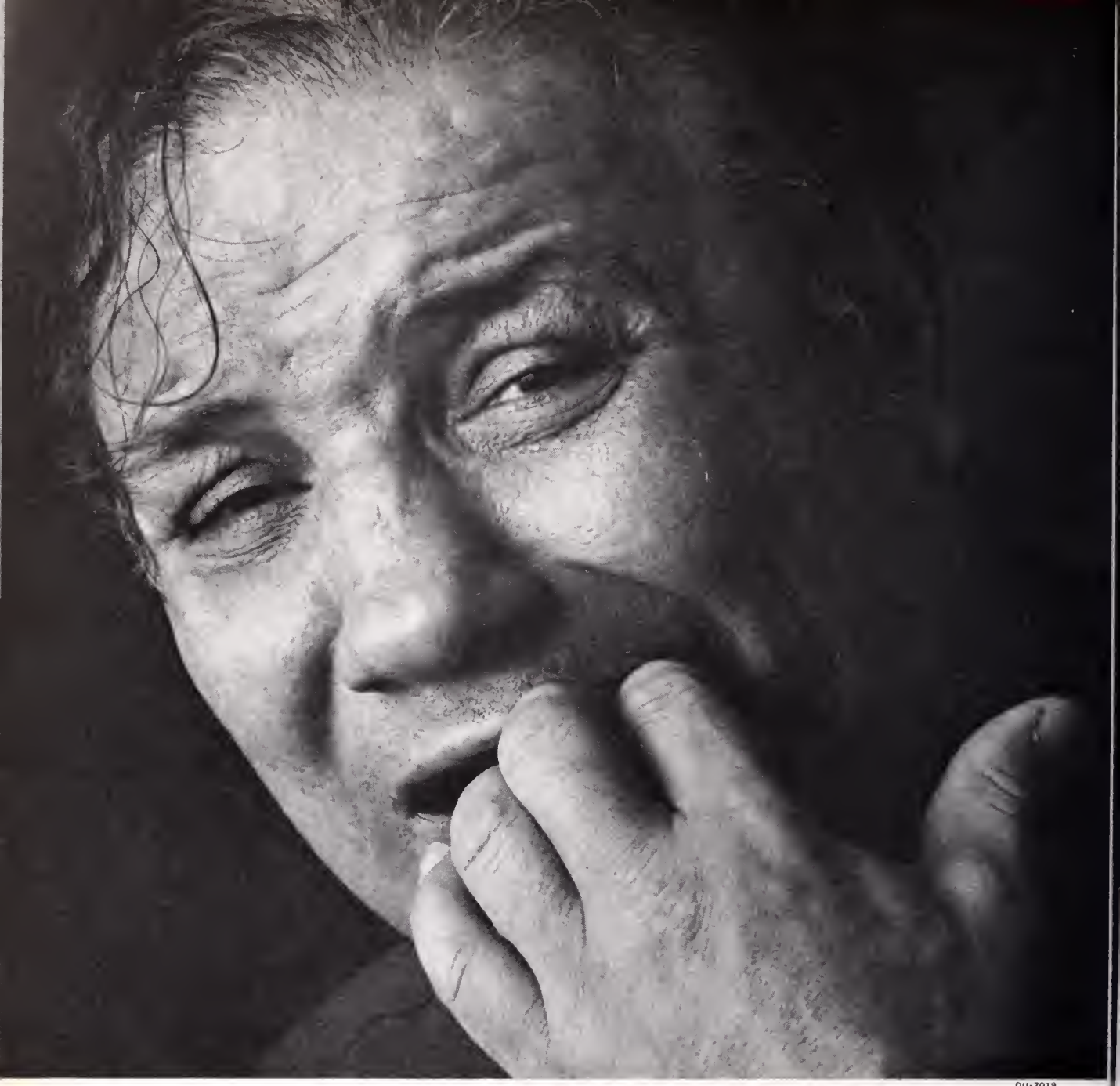
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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MESSAGE FROM THE PRESIDENT



Delivering Health Care—A Serious Matter

ON September 3, 1971, the officers of KMA were invited by letter to join the Kentucky Public Health Association in a tour, September 27, 28, and 29, focusing on the health and environmental needs of Kentuckians.* Madisonville, Barbourville, and Louisville are the sites of the three-day hearings. Dr. C. Arden Miller, M.D., Vice-Chancellor, Health Sciences, University of North Carolina, and Mr. C. C. Johnson, Associate Director of American Public Health Association and an environmental specialist, will be on the tour.

A letter to the president of K.P.H.A. from the American Public Health Association dated April 29, 1971, suggested a tour in mid-September and said that staff work for the tour should be done in July and August. This was to allow time for preparation of a booklet offering permanent record of the tour to be distributed for the opening of the Kentucky legislature in 1972. To be featured on the tour, according to the letter, are strip-mining and occupational health in Eastern Kentucky; air and water pollution; lack of comprehensive health care for the poor in Louisville; isolation and inadequate health care for the aged and others in Appalachia; and racism in medical and dental schools.

In a circular to its members, the K.P.H.A. stated that it is the *only* viable organization representing the health needs of the people of Kentucky.

Obviously, a three-day tour in three locations is not a fact-finding survey. The findings will be what the directors want them to be in order to influence the type of legislation they want. On the other hand, the Kentucky Chamber of Commerce is holding ten meetings in cooperation with the Comprehensive Health Planning Councils over the state in October on costs of health care. These should receive our participation.

The KMA has been interested in these problems for many years and has accomplished more than can be detailed here in supplying doctors to rural areas. The KMA would welcome help in supplying doctors to under-served areas. Admission to medical and dental schools is controlled by qualifications of the applicants, not the race.

The excellent roads of Kentucky have made top medical care available in less than an hour's drive. Peer review organizations set up in KMA at the county, regional, and state level are controlling not only the cost of medical care but also the quality. At a legislative hearing in September, 1969, for the Legislative Research Commission, the KMA outlined a plan for the re-organization of the State Board of Health and suggested that consumers be added to the board.

A special committee studied and made recommendations in 1967 on the fragmentation of governmental health services. We continue to attempt to resolve this problem.

The K.P.H.A. has, in the past, involved itself in a desirable goal of training and educating its members, a professional group of public health workers. Unfortunately, the K.P.H.A. now seems to be more interested in publicity and legislative activity than in working out the problems and their solutions for Kentuckians.

John S Harter

**This article went to the press on September 15, prior to the conduct of the tour.*

Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

IN KENTUCKY

OCTOBER

26 Postgraduate course, "Which Antibiotic Do I Use?," by Garrett Adams, M.D., Assistant Professor, Department of Pediatrics, University of Louisville School of Medicine, 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

27 Twelfth Annual John Walker Moore Lecture, Carl V. Moore, M.D., Louisville Society of Internists and Department of Medicine, University of Louisville School of Medicine, 1:00 p.m., Library, Health Sciences Center, Louisville

NOVEMBER

4-5 Fifth Annual Newborn Symposium, "Hematological Problems in the Newborn," Department of Pediatrics, University of Louisville. For further information write: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, 226 East Chestnut Street, Louisville, Kentucky 40202

19-20 Postgraduate course, "Psychiatry Put into Practice," University of Kentucky Medical Center. For further information write: Frank R. Lemon, M.D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506

23 Postgraduate course, "Delayed Onset of Puberty," by Duncan Macmillan, M.D., Associate Professor, Department of Pediatrics, University of Louisville School of Medicine, 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

DECEMBER

17-18 Postgraduate course, "The Practical Ophthalmology of Childhood," University of Kentucky Medical Center. For further information write: Frank R. Lemon, M.D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506

IN SURROUNDING STATES

OCTOBER

13-14 Postgraduate course, "Renal Disease—Practical Applications," Cleveland Clinic Educational Foundation, Cleveland, Ohio

16-21 Fortieth Annual Meeting, American Academy of Pediatrics, Chicago, Ill.

18-22 Fifty-seventh Annual Clinical Congress, American College of Surgeons, Atlantic City, New Jersey

20-21 Postgraduate course, "Clinical Aspects of Liver Disease," Cleveland Clinic Educational Foundation, Cleveland, Ohio

24-28 Third Annual Fall Scientific Assembly (37th Annual Meeting), American College of Chest Physicians, Philadelphia, Pa.

31-Nov. 4 Annual Convention, Southern Medical Association, Fontainebleau Hotel, Miami Beach, Florida

NOVEMBER

1 Twenty-eighth Annual Meeting, Southern Chapter of the American College of Chest Physicians, in cooperation with the Southern Medical Association, Fontainebleau Hotel, Miami Beach, Florida

10-11 Postgraduate course, "Problems in Internal Medicine," Cleveland Clinic Educational Foundation, Cleveland, Ohio

28 Twelfth Annual Meeting, American College of Nutrition, New Orleans, Louisiana. Hotel reservation should be made through the AMA Housing Bureau

28-Dec. 1 Twenty-fifth Clinical Convention of American Medical Association, New Orleans, Louisiana

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.



THE INSURANCE PAGE



Increased Utilization of Outpatient Diagnostic Services

THE National Association of Blue Shield Plans is faced with a large deficit in its Federal Employee Program (FEP). Because of this, physicians have been asked to help curb sharp increases in utilization of outpatient diagnostic services.

Approximately 61 per cent of all eligible federal employees and their families are enrolled in FEP. This includes the majority of Congressmen and government workers. Ira C. Layton, M.D., Blue Shield's Chairman, said that combined utilization of outpatient x-ray and laboratory services under FEP has increased 100 per cent since becoming basic benefits under the FEP program in 1968.

Currently, those outpatient services account for 50 per cent of the claims volume and nearly $1.00 out of every $4.00 in benefits paid by Blue Shield under FEP.

This information appeared in *American Medical News,* July 19, 1971. In the same issue there appeared a news item stating that the nonprofit Washington (D.C.) Hospital Center had reduced its room charges $3.00 a day. The decision to lower rates came after administrators disclosed that the hospital earned $1.6 million in the first five months of this year. Among other factors which were cited for the surplus, was increased profits from referrals to the hospital laboratory testing services.

By adding the information obtained in these two news items, it would appear that a great part of the increased cost in x-ray and laboratory was from referral patients. That is to say, that the doctor who prescribed the laboratory and x-ray services received no income from the increased services; therefore, financial gain could not have been a cause for prescribing these services.

It would appear that increased demand on the part of the subscriber (including the majority of Congressmen) was the cause of the 100 per cent increase in utilization of these services.

It would be interesting to note how many Congressmen are demanding extra laboratory and x-ray services while expressing public opinion that something must be done about the increased cost of medical care and blaming the doctor for over-utilization in order to increase his income.

It is apparent that increased utilization of outpatient diagnostic services has not decreased hospitalization as predicted.

LEWIS DICKINSON, M.D.

A Link in the Chain

auxiliary



Mrs. David Stevens, Lexington, was installed as President of the Woman's Auxiliary to KMA during the Auxiliary's 49th Annual Convention, September 20-22. She will be writing the "A Link in the Chain" Page for The Journal during the 1971-72 organizational year.

I accept the office of President of the Woman's Auxiliary to the Kentucky Medical Association with feelings of pride—pride in this organization and what it stands for, and the honest pride in the fact that you chose me to be your President. In the years that I have been involved in community affairs, I have found no other group that could come close to the Auxiliary in friendships freely given and opportunities offered for service to others. It is a unique organization of women bound together by their relationship to an uncommon group of men.

Our theme this year is "Let's Care"—about ourselves and our families, about other physician's families, and about our communities.

The first stated objective in our revised bylaws is to assist the KMA in its program for the advancement to medicine and health education. Our physician husbands live by the principle that the first duty of the medical profession is to render service to humanity. We Auxiliary members, in our own way, are trying to match this commitment.

The national Auxiliary provides a wide range of information and material, the state Auxiliary gives advice, priority suggestions, and gentle persuasion. But it is the county Auxiliary that acts. It is each of you in your county Auxiliary who decides what will be done this year in your town.

To strengthen our Auxiliary programs, we are so fortunate that the KMA has made it possible for us to have a state Auxiliary coordinator. As most of you know, Rose Gardner has been working on a part-time basis since March in this capacity. She will help us to work more closely with KMA and will be invaluable in strengthening our programs by improving our lines of communication and providing continuity.

"Let's Care"—about other physician's families and the medical profession as a whole. For the past 20 years, and especially the past 10, American medicine has suffered relentless attack. It has been kept so busy fending off its critics that it is just now beginning to tell its story, which is, quoting James Kilpatrick, columnist, "that doctors work far harder than most of us, give more of themselves to public service, often earn less after taxes than plumbers, politicians, and actors."

Now, as never before, it is important for every doctor's wife in Kentucky to support medicine by being an Auxiliary member. Let the public see that you are supporting medicine with your money as well as your voice.

I look forward to the coming year eagerly. I hope you do, too. It will be a pleasure to work with such an outstanding group of state and county leaders, and I look forward to visiting with your county auxiliaries.

MRS. DAVID STEVENS, PRESIDENT
WOMAN'S AUXILIARY TO KMA

MEDICAL SCHOOLS

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Department of Psychiatry
University of Kentucky College of Medicine

The faculty of the Department of Psychiatry offer their assistance to Kentucky physicians in providing appropriate psychiatric care for their patients. Evaluation and treatment services are available for all kinds of emotional and psychological problems for individuals of all ages, educational and socio-economic levels. The following service categories are provided:

Child Psychiatry Outpatient Service

Diagnostic evaluation and treatment planning for the full range of behavior and learning problems of children and adolescents with related family problems (e.g., children with bizarre, immature, withdrawn, hostile-aggressive behaviors, enuresis, encopresis, or phobias, including school phobia).

Who to call: Child Psychiatry Outpatient Clinic —233-6006
Robert G. Aug, M.D., Chief—233-6102

Psychiatry Inpatient Service

Acute, short term treatment for patients, of all ages, with depression, drug or alcohol abuse, confusional states, psychotic and major neurotic disturbances, organic brain dysfunction.

Who to call: Referral for hospital admission. Call 233-5000 (any hour) and ask for the Psychiatric Admitting Resident.
Cornelia C. Wilbur, M.D., Chief —233-5686
George M. Henry, M.D., Assoc. Chief—233-5293

Adult Psychiatry Outpatient Service

Comprehensive management of all mental, emotional, and behavioral problems which do not require hospitalization. Special emphasis on aiding physicians in the more efficient management of acute, temporarily disturbed patients. Special services for marital and family problems.

Who to call: Adult Outpatient Clinic —233-6005
Maxie Maultsby, M.D., Chief —233-6007

Special Problem Areas

Legal and Sexual

Psychiatric evaluation of patients referred by the courts or attorneys, and of patients with special sexual problems.

Who to call: Cornelia Wilbur, M.D., —233-5686

Psychosomatic

Consultations available on patients with hypoehondriasis, hysterical-conversion reactions, and any intractable medical problems complicated by emotional factors. This includes cardiac neuroses, diabetes, ulcer, asthma, headache, etc.

Who to call: Mary N. Smith, M.D.,—233-6001
Maxie C. Maultsby, M.D.,—233-6007

If you cannot reach the right person, call Arnold M. Ludwig, M.D., Chairman, Department of Psychiatry—233-5828.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

THIS 27 year old MWF, G-7, now P-7 was known to have rheumatic heart disease since childhood. Severe mitral stenosis was present with a history of intermittent paroxysmal nocturnal dyspnea and hemoptysis during her two previous pregnancies. She was admitted 8/18/69 through 9/8/69 at 20 weeks gestation for congestive heart failure and pulmonary embolus for which she was heparinized, digitalized, and received diuretics.

She was admitted again on 11/17/69 through 11/22/69 for congestive heart failure at 33 weeks gestation.

Her final admission was 12/2/69, at 34½ weeks, with atrial fibrillation, until delivery on 1/7/70 (38 weeks). At the onset of elective induction she was noted to be somewhat dyspneic and tachypneic with circumoral cyanosis. Her lungs were clear. After 26 minutes of induction, her symptoms increased and the oxytocin infusion was stopped. Rales developed in the right lung base anteriorly. Labor progressed without oxytocin, and the congestive heart failure was treated successfully with digoxin and furosemide.

Delivery was spontaneous with epidural anesthesia. A bilateral tubal ligation was done on the delivery table with the same anesthetic. She did well and had an uneventful puerperal course.

On 1/12/70, she was transferred to the medicine service, where she had a cardiac catheterization on 1/14/70 showing tricuspid insufficiency, mitral insufficiency, and mitral stenosis with pulmonary hypertension. She was discharged on 1/15/70, to return to clinic on 1/19/70 for scheduling for cardiac surgery.

She returned to Cardiology Clinic on 1/19/70 and was discharged home in good condition. She was seen in Cardiology Clinic again on 1/26/70 with increased dyspnea, dusky color, 2 to 3+ ankle edema, heart rate of 110, and an irregular pulse. Her lungs were clear. She was also seen by Cardio-Thoracic Surgery that day and scheduled for admission on 2/5/70 for cardiac surgery on 2/10/70. She was sent home on 1/26/70 on 0.25 mg digoxin Bid and 40 mg furosemide daily.

The rescue squadron brought the patient to the emergency room at 3:40 a.m. on 1/27/70—dead on arrival. No information was available from the family as to what happened at home, and no autopsy could be obtained.

Probable causes of death: repeat pulmonary embolus, or digoxin toxicity.

Comment

This patient's prenatal course was relatively uneventful considering the extent of her rheumatic heart disease. Therapeutic abortion was considered, but was declined by the patient. In addition, both the medical and obstetrical consultants felt this patient could be safely carried through pregnancy.

The episode of pulmonary embolism at 20 weeks gestation was successfully treated with heparin which was discontinued at discharge from the hospital. Coumadin or similar compounds were not used because they cross the placenta and are potentially dangerous to the fetus.

Labor was induced electively at 38 weeks, when the cervix became ripe and adequate fetal size had been reached, so that delivery could be accomplished at a convenient time with as much anesthesia, medical, and pediatric help available as possible. Initial discomfort was overcome without problem. Bilateral tubal ligation was done with the same anesthetic to avoid a second anesthetic at a later time when fluid shifts are a problem. Epidural is particularly good for patients with mitral valvular disease, because venous return and cardiac work load can be controlled, thereby lessening cardiac stress.

The puerperium was uneventful. The fatal episode is unclear but most likely due either to repeat pulmonary embolus or digoxin toxicity. In view of her repeated antepartum hospitalizations and problems and the seriousness of her disease, this patient should have been hospitalized on 1/26/70 when she obviously was in congestive heart failure with atrial fibrillation.

The Committee classified this case as an indirect obstetric. The preventable factor was most likely due to the fact she was not hospitalized for a longer period post-delivery or re-hospitalized when seen in the clinic.

DOCTOR!

You are cordially invited to attend

KENTUCKY THORACIC SOCIETY'S FALL CONFERENCE ON RESPIRATORY DISEASES

November 5-6

Ramada-Imperial Inn — Lexington, Kentucky

FRIDAY, NOVEMBER 5

6:30 p.m. DINNER—Regency Room—"Environmental Health"

Honorable Carl D. Perkins
House of Representatives,
United States Congress

SATURDAY, NOVEMBER 6

8:30 a.m.-2:00 p.m. SCIENTIFIC SESSION—Regency Room

Moderator: William P. McElwain, M.D.

8:30 a.m. "Evaluation of Short Term Hospitalization of TB Therapy"

Pro *John G. Weg, M.D.*
Chief, Pulmonary Division
University of Michigan School of Medicine

Con *H. Mac Vandiviere, M.D.*
Professor of Community Medicine
University of Kentucky School of Medicine

9:30 a.m. "Martin County Project"

Michael L. Furcolow, M.D.
Professor of Community Medicine
University of Kentucky School of Medicine

10:00 a.m. "INH Prophylaxis — Question of Toxicity"

Vernon N. Houk, M.D.
Deputy Chief, Tuberculosis Branch
State and Community Services Division
Center for Disease Control, Atlanta

10:30 a.m. Coffee Break

Business Meeting of Society

Moderator: Leslie W. Blakey, M.D.

11:00 a.m. "Pulmonary Disease Disability Evaluation for Social Security"

11:30 a.m. "Lung Abscess"

Daniel N. Pickar, M.D., Chief
Pulmonary Disease Department
Veterans Administration Hospital, Lou.

Judah L. Skolnick, M.D.
Pulmonary Disease Fellow
University of Louisville School of Medicine

12:00 noon "Drug Management of Tuberculosis"

Raymond F. Corpe, M.D.
Battey State Hospital, Rome, Ga.

12:30 p.m.-2:00 p.m. "Stump the Experts — Case Presentations"

Panel: J. T. Ling, M.D., Radiologist
Louisville General Hospital

Richard B. McElvein, M.D.
Thoracic Surgeon, Lexington

Robert W. Penman, M.D.
Associate Professor of Medicine
University of Kentucky School of Medicine

KENTUCKY THORACIC SOCIETY · 1954 ·

Application has been made for AAFP Prescribed credit

NOTE: All health professionals are invited to both sessions.

Scientific Session I — November 5 is primarily for paramedical personnel.

Scientific Session II — November 6 is primarily for physicians.

® NTRDA

Because bacterial proliferation in the urine is a function of time and retention,[1,2,3] *dawn can be...*

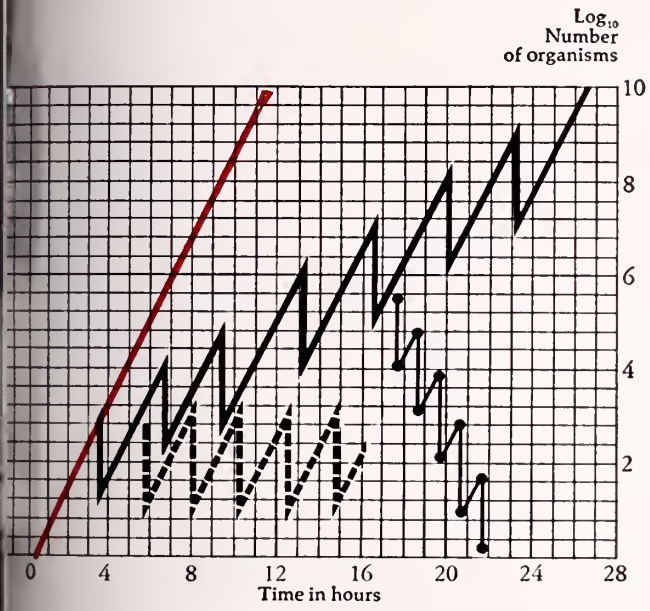
the darkest hour.



Voiding frequency and bacterial build-up[1]

Graph shows the theoretical effect of various voiding frequencies on bacterial proliferation in the urine.

- maximum growth rate during the overnight period
- voiding every 3½ hours
- voiding every 2½ hours
- voiding every hour: the "washout" effect



For through-the-night coverage

Force fluids. Frequent micturition. It's hard to fault this regimen for dealing effectively with an acute bladder infection. Another fundamental adjunct to treatment is drug therapy for round-the-clock antibacterial coverage. Coverage that may be especially desirable during the night hours of sleep when urinary retention favors bacterial build-up in the bladder. This is the coverage that Gantanol (sulfamethoxazole) *b.i.d.* can provide.

Controls susceptible gram-negative and gram-positive bacteria

Within 2 to 3 hours of the initial 2-Gm adult dose, effective antibacterial levels in blood and urine begin working to control the most common urinary tract invaders. Subsequent 1-Gm *b.i.d.* doses maintain coverage your patient needs to fight *E. coli* and other susceptible gram-negative and gram-positive pathogens.

Your options: tablets or suspension

Prescribe Gantanol Tablets or the pleasant-tasting Suspension. Either dosage form provides your patient with the all-day, all-night coverage she needs to fight off nonobstructed cystitis.

References: 1. O'Grady, F., and Cattell, W. R.: *Brit. J. Urol.*, 38:156, 1966. **2.** Hinman, F., Jr., and Cox, C. E.: *J. Urol.*, *96*:491, 1966. **3.** Lapides, J., *et al.*: *J. Urol.*, *100*:552, 1968.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

In nonobstructed urinary tract infections

Gantanol® B.I.D. (sulfamethoxazole)

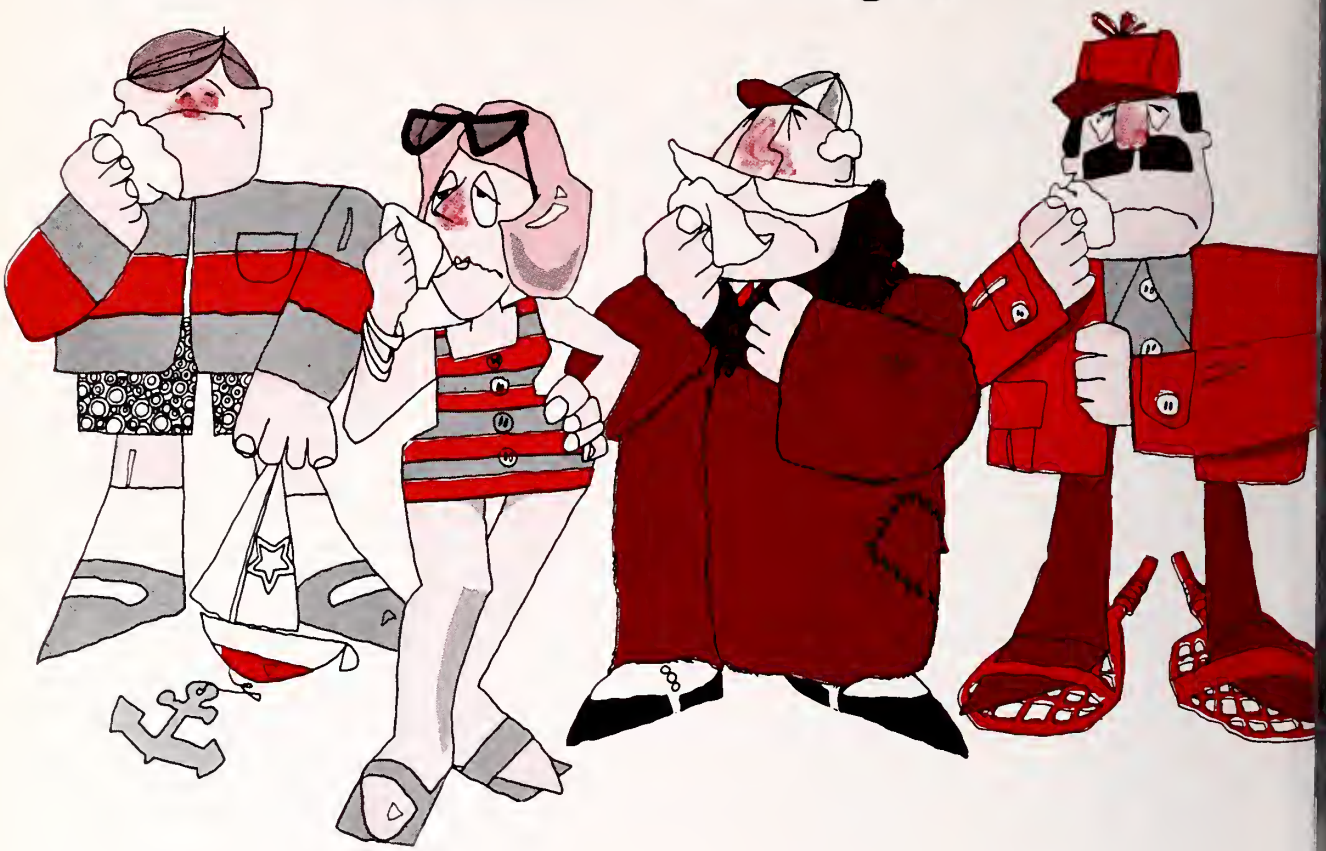
12 hours of therapy with every dose

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

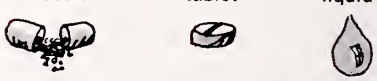
Sprigg **Subber** **Awtubb** **Widder**

codes **hayfeber** **allerdgies** **"flu"**



relieve them all with all-season ISOCLOR®

timesule® tablet liquid



TWO ACTIVE COMPONENTS
give "four season" sufferers dependable relief

Chlorpheniramine Maleate dries runny noses and eyes, quiets sneezing, wheezing, soothes itching and reduces postnasal drip—all with a particularly low index of side effects such as drowsiness.

Pseudoephedrine HCl: decongests throughout *entire* respiratory tract, opening nasal passages, dilating bronchioles, relaxing "tight chest"—as effectively as ephedrine, but with much less CNS or cardiovascular stimulation.

COMPOSITION: Each tablet or 10 cc. (2 teaspoonsful) of liquid contains:

Chlorpheniramine Maleate 4 mg.
Pseudoephedrine HCl 25 mg.

Each Isoclor Timesule contains:

Chlorpheniramine Maleate 10 mg.
Pseudoephedrine HCl 65 mg.
In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For relief of upper respiratory and bronchial congestion associated with: the common cold, hay fever and allergies, sinusitis, influenza, and vasomotor and allergic rhinitis.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe card disease.

PRECAUTIONS: Use with caution in patients with hyperthyr ism. Patients susceptible to the soporific effects of chlorphen mine should be warned against driving or operating machin should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescript

SUPPLIED: Tablets: Bottles of 100; Liquid: Pints and gall Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 3-4 h.	2 tsp. q. 3-4 h.	1 q. 12 h
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

ARNAR-STONE LABORATORIES, INC.
Mount Prospect, Illinois, U.S.A. 60056
Subsidiary of American Hospital Supply Corporation



Empirin® Compound with Codeine, gr. ½ or gr. 1

Helps overpower pain

Each tablet contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.
No. 3 contains codeine phosphate* (32.4 mg.) gr. ½.
No. 4 contains codeine phosphate* (64.8 mg.) gr. 1.
(Warning—may be habit forming.)

CIII Empirin Compound with Codeine is now classified in Schedule III. Available on oral prescription and may be refilled 5 times within 6 months, unless restricted by State law.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709



Still serving...

Miltown®
(meprobamate)

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

SALUTENSIN®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.

Brief Summary of Prescribing Information—9-9/22/69.
For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

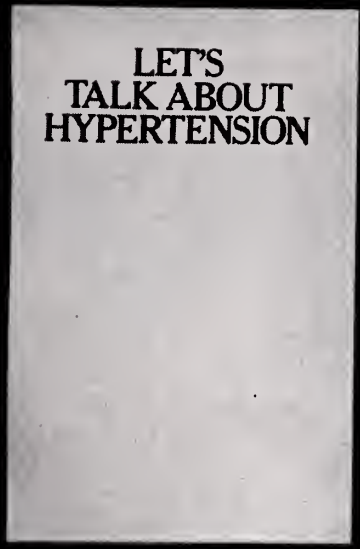
Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Service items pictured at right and Salutensin samples are available on request from your Bristol Representative or on written request.

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

My Doctor's new program to help make hypertension easier to live with—



My guide book from Dr. Fox...



Following my Doctor's good advice...



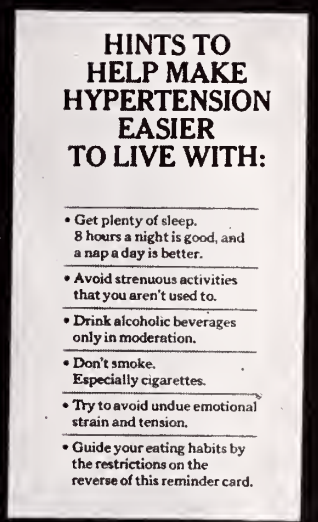
No problem dieting with this to advise me.



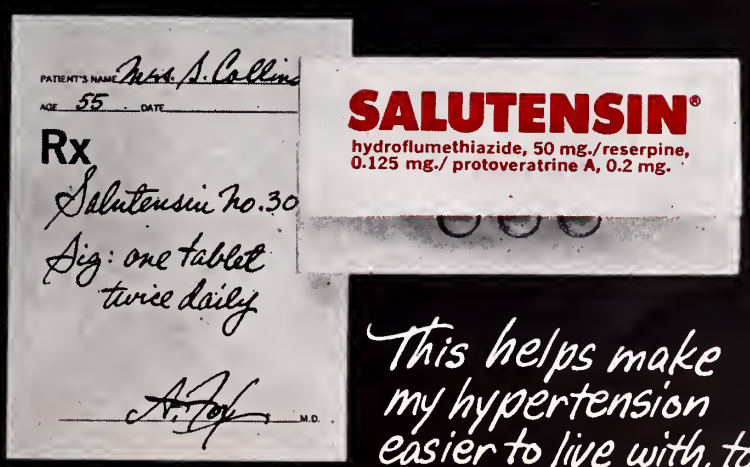
Dining out— on my diet!



Getting the exercise I need—



This goes where I go...



This helps make my hypertension easier to live with, too.

HAPPINESS IS A DEAD PINWORM



Mintezol® is nonstaining

MINTEZOL®
(THIABENDAZOLE | MSD)

SUSPENSION, 500 mg per 5 cc

You'll rely on MINTEZOL (Thiabendazole, MSD) often for pinworm disease. Not just because that's a very common helminthic infestation, but because MINTEZOL has such a high degree of efficacy.

MINTEZOL also provides an unusually wide range of action—against threadworm, hookworm, whipworm, and large roundworm disease. This broad spectrum of activity makes it particularly effective in these mixed worm infestations.

MINTEZOL isn't a dye. So you won't hear complaints about stained teeth, clothing, or bed linen. The most frequently occurring side effects have been anorexia, nausea, vomiting, and dizziness.



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: May impair alertness; operation of automobiles and other activities made hazardous by diminished alertness should be avoided. If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed; erythema multiforme, including Stevens-Johnson syndrome (with a fatal case), has been associated with thiabendazole therapy in children. Safe use in pregnancy or lactation has not been established.

Precautions: Since thiabendazole is metabolized in the liver and excreted by the kidneys, hepatic and renal function should be carefully monitored in patients with dysfunction of these organs.

Adverse Reactions: Frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, collapse, abnormal sensation in eyes, blurring of vision, hyperirritability, numbness, hyperglycemia, xanthopsia, enuresis, perianal rash, cholestasis and parenchymal liver damage, hypotension, and a transitory rise in cephalin flocculation and SGOT. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. Appearance of live Ascaris in the mouth and nose has been reported on rare occasions.

Some patients may excrete a metabolite which imparts an odor to urine, much like that which occurs after ingestion of asparagus. Crystalluria without hematuria has been reported on occasion, but has promptly subsided with discontinuation of therapy; while the etiologic role of thiabendazole has not been established, the possibility of crystalluria should be kept in mind. Transient leukopenia has been reported in a few patients, but the cause and effect relationship in these cases has not been established.

NOTE: In children weighing less than 30 pounds, clinical experience with thiabendazole for treatment of intestinal parasitosis has been limited. Thus, the benefits of this therapy should be weighed against the possibility of adverse reactions.

Supplied: Suspension, containing 500 mg per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

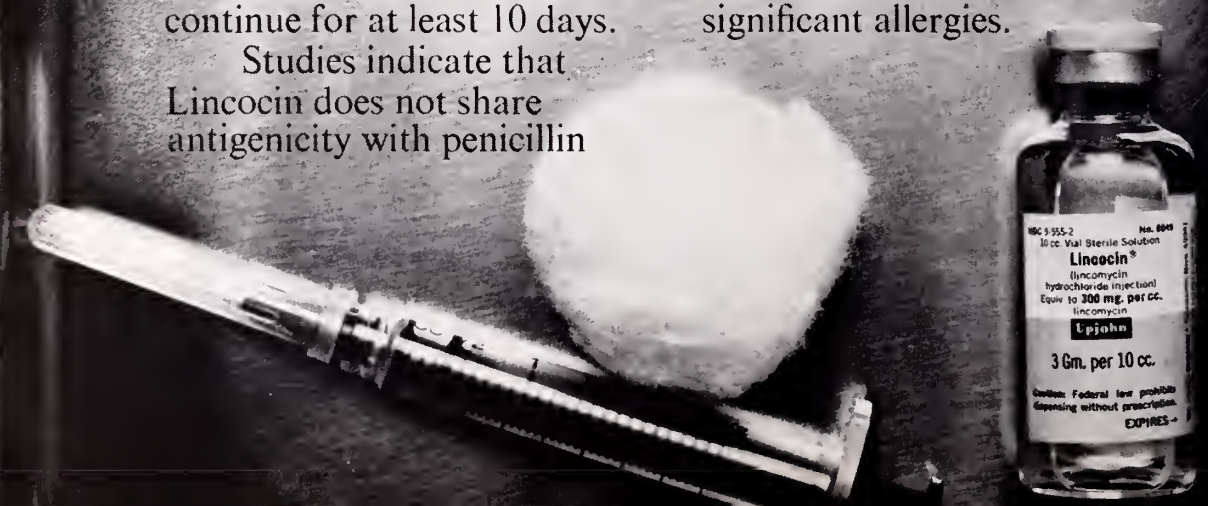
MSD MERCK SHARP & DOHME

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1971 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn

in cardiac edema

Dyazide®

Trademark

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

SK&F

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Once in the patient's body, it rapidly hydrolyzes into ampicillin.

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Extensive clinical experience has shown that this ampicillin derivative offers unique advantages over the ampicillin you may be presently prescribing:

1/ A uniform adult and a uniform pediatric dosage in all mild-to-moderate infections due to susceptible organisms—respiratory, genitourinary, G.I., skin and soft tissue.

Adults: 225 mg. q.i.d.

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2/ A low dosage for mild-to-moderate genitourinary infections due to susceptible organisms.

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4/ Parenteral forms remain stable up to six hours after reconstitution with sterile water ...longer than any ampicillin.

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Please see next page for brief summary of prescribing information.

BRISTOL

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BRIEF SUMMARY OF PRESCRIBING INFORMATION
(A) 12/28/70
For complete information, consult Official Package Circular.

Actions: Hetacillin provides bactericidal levels of ampicillin but has no antibacterial activity itself. It hydrolyzes to ampicillin and has a half-life of 20 minutes at pH 7.1.

Indications: Hetacillin is indicated in the treatment of susceptible strains of the following organisms in the diseases listed. Bacteriology studies to determine the causative organisms and their sensitivity should be performed. Therapy may be instituted prior to obtaining results of sensitivity testing.

Group A beta-hemolytic Streptococcus: Tonsillitis, pharyngitis, otitis media, skin and soft tissue infections.

Diplococcus pneumoniae: Broncho- and lobar pneumonia, otitis media.

Nonpenicillinase-producing *Staphylococcus aureus:* skin and soft tissue infections, otitis media.

H. influenzae: Bronchitis and bronchopneumonia.

Escherichia coli: Cystitis, pyelonephritis, prostatitis/urethritis, skin and soft tissue infections.

Proteus mirabilis: Cystitis, pyelonephritis, skin and soft tissue infections.

Enterococcus (*Streptococcus faecalis*): Cystitis, pyelonephritis, prostatitis/urethritis.

Shigella species: Shigellosis.

Salmonella species: Salmonellosis (parenteral only).

Indicated surgical procedures should be performed.

Use parenteral drug only in severe infections or in patients unable to take oral medications.

Contraindications: A history of allergic reactions to penicillins or lidocaine.

Warning: Anaphylaxis may occur, particularly after parenteral administration and especially in patients with an allergic diathesis. Check for a history of allergy to penicillins, cephalosporins or other allergens. If an allergic or anaphylactic reaction occurs, discontinue hetacillin and institute appropriate treatment.

Usage in Pregnancy: Safety for use in pregnancy is not established.

Precautions: Mycotic or bacterial superinfections may occur. Assess renal, hepatic and hematopoietic function periodically during long-term therapy. Because intravenous administration of potassium hetacillin in doses in excess of 5 mg./Kg. has been noted to enhance the vasopressor effect of epinephrine in dogs, precautions should be taken with patients receiving epinephrine concurrently.

Adverse Reactions: Untoward reactions include: Glossitis, stomatitis, black "hairy" tongue, nausea, vomiting and diarrhea, skin rashes, urticaria, exfoliative dermatitis, erythema multiforme and anaphylaxis (usually with parenteral administration). Anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been noted, are usually reversible and are believed to be hypersensitivity phenomena.

Elevations in one or more liver function tests have been reported without any evidence of hepatic toxicity.

Local reactions: Thrombophlebitis at the site of intravenous injection has been reported.

Usual Dosage: Patients weighing 90 lbs. or more: 225 mg. q.i.d. Patients weighing less than 90 lbs.: 2.5 mg./lb. q.i.d.

Group A beta-hemolytic streptococcal infections should be treated for at least 10 days. Administer oral preparations in a fasting state to insure maximum absorption.

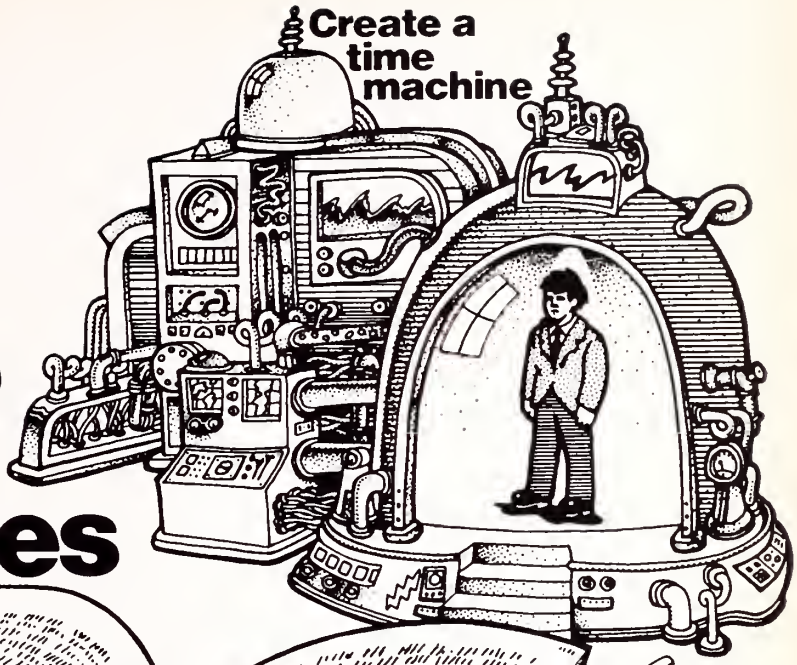
Recommended dosages (expressed in terms of ampicillin activity) in susceptible mild-to-moderate infections*

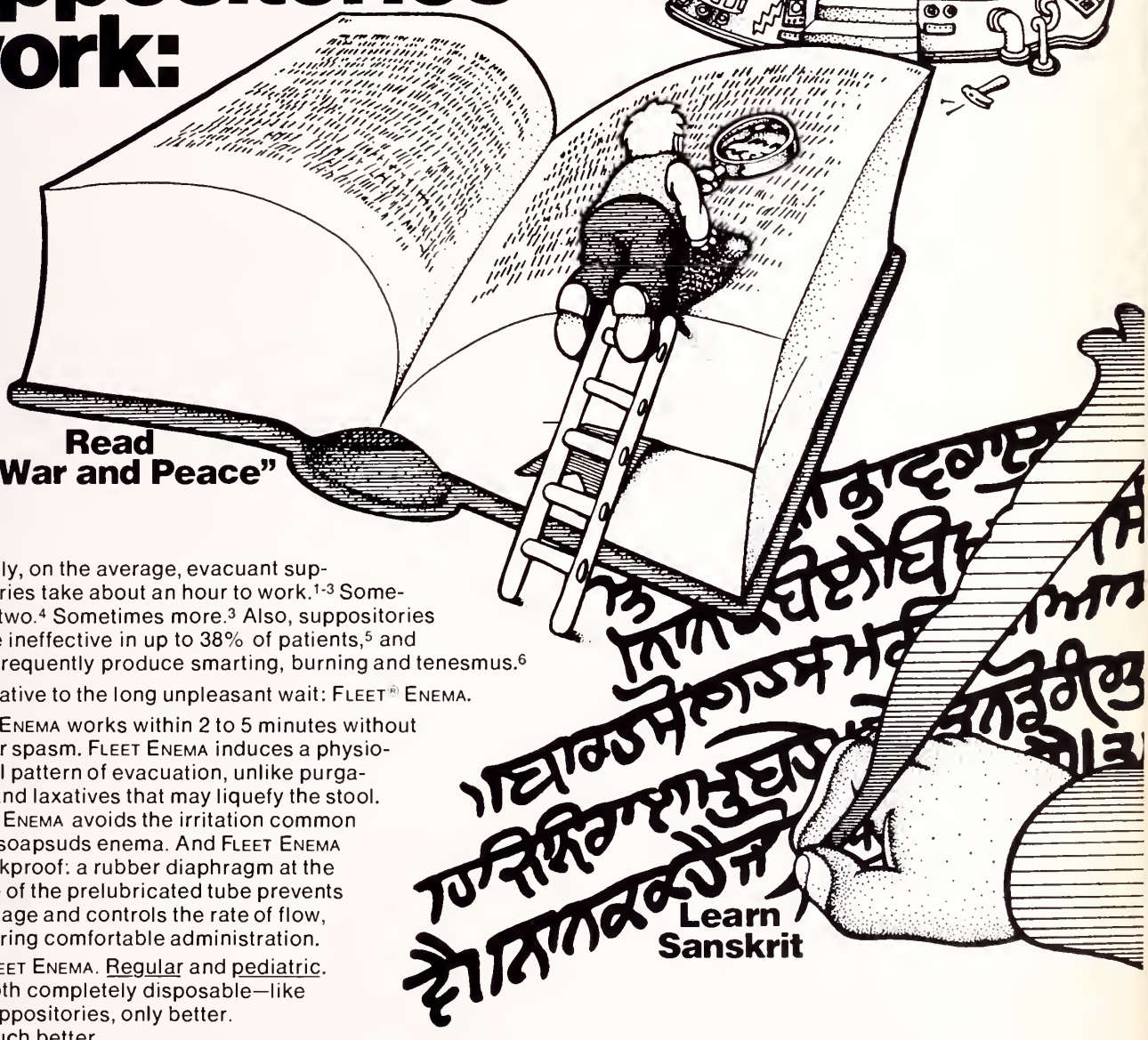
Versapen® (hetacillin) **112.5 mg.**	Chewable Tablets	*Usual pediatric dosage:* 10 mg./lb./day in 4 equally divided doses. For a 45 lb. child: one tablet *q.i.d.*
	Oral Suspension (112.5 mg./5 ml.)	*Usual pediatric dosage:* 10 mg./lb./day in 4 equally divided doses. For a 45 lb. child: 1 tsp. *q.i.d.* Available in 40 ml., 80 ml., and new 100 ml. bottles.
	Pediatric Drops (112.5 mg./ml.)	*Usual dosage:* 10 mg./lb./day in 4 equally divided doses. For a 10 lb. child: ¼ dropper *q.i.d.* Available in 10 ml. bottles.
Versapen®**-K** (potassium hetacillin) **225 mg.**	Capsules	*Usual adult dosage:* one 225 mg. capsule *q.i.d.*
	I.V. I.M. with Lidocaine HCl (20 mg./vial)	*For patients weighing 90 lbs. or more:* 225 mg. *q.i.d.* *For patients weighing less than 90 lbs.:* 10 mg./lb./day in 4 equally divided doses.

*For severe infections—Adults: 450 mg. *q.i.d.* Children up to 90 lbs.: 20 mg./lb./day in 4 equally divided doses. Very serious infections may require very high doses and prolonged therapy. *Note:* Versapen® has been issued Patent No. 3198804

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Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964

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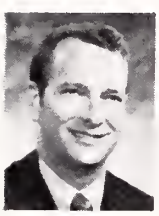
Tom Stroud has been named Director of the Division. The state has been divided into a Western Region, with Alan Leichhardt as Regional Director, and an Eastern Region, with Dennis Reed as Regional Director. Don Haberle has been named as Special Representative and will be working with alternate systems of health care delivery.

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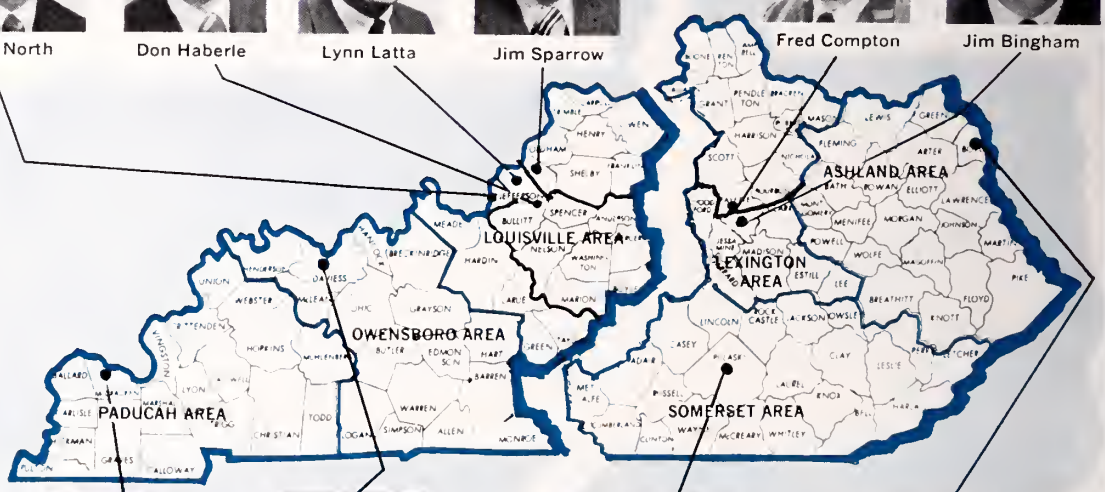

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Indications: Acute, recurrent or chronic urinary tract infections (primarily cystitis, pyelitis, pyelonephritis) due to susceptible organisms, (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and less frequently, *Proteus vulgaris)* in the absence of obstructive uropathy or foreign bodies. **Important Note:** *In vitro* sulfonamide sensitivity tests are not always reliable; tests must be coordinated with bacteriologic and clinical response. Aminobenzoic acid should be added to follow-up culture media for patients already taking sulfonamides.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including sulfonamides.

Free sulfonamide blood levels should be measured in patients receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Hypersensitivity to sulfonamides, infants less than 2 months of age, pregnancy at term, and during the nursing period.

Warnings: Safety of sulfonamides in *pregnancy* has not been established. Sulfonamides will not eradicate group A streptococci. Deaths have been reported from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias associated with sulfonamide administration. Clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution when impaired renal or hepatic function, severe allergy or bronchial asthma is present. In glucose-6-phosphate dehydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia, methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia, allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria. Periarteritis nodosa and L.E. phenomenon have occurred with sulfonamide therapy. Sulfonamides bear certain chemical similarities to some goitrogens, diuretics and oral hypoglycemic agents. Goiter production, diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. Cross-sensitivity may exist with these agents.

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Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

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Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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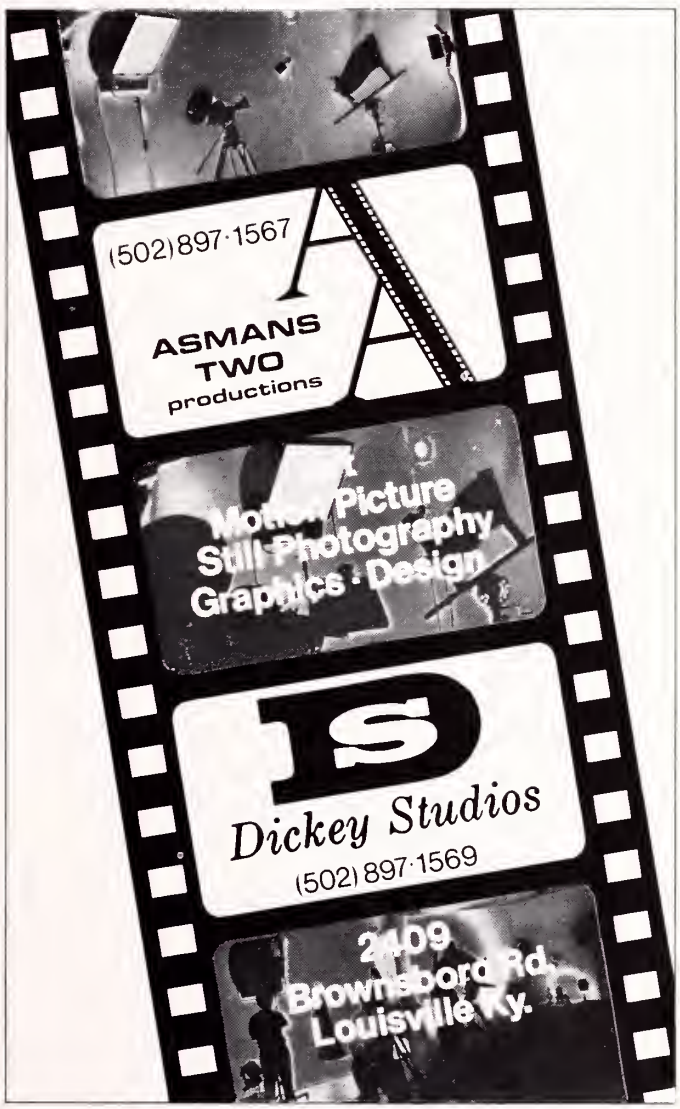
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Clinical Evaluation of the Ischemic Leg

ALLAN M. LANSING, M.D., PH.D., F.R.C.S.(C)*

Louisville, Kentucky

Arterial insufficiency of the leg is a common problem. Simple office examination will usually reveal the diagnosis and permit the physician to recommend therapy.

Arterial insufficiency of the extremities is an extremely common entity and each physician should be able to identify its presence and locate the probable site of obstruction by means of a simple office examination.

Clinical Examination

The initial symptom is usually pain. When the degree of ischemia is mild, this takes the form of *claudication,* the familiar cramp in the calf muscle that occurs with walking. This comes on at a certain specific distance, is relieved by resting, and occurs when the distance is walked once again. If the patient walks faster, the claudication occurs at a shorter distance, whereas if he walks more slowly he can go farther before he has to rest. If the obstruction is primarily in the internal iliac arteries, the claudication may involve the gluteal region and be mistaken for arthritis of the hip. The classical cycle of exercise-pain-rest-relief-exercise is typical and the patient has no symptoms other than during this period.

If the ischemia is more severe, *rest pain* develops. In this phase, the patient notices that he awakens at night with pain in the foot or heel and this is relieved by getting out of bed to walk around or stand on the leg. With even more advanced degrees of ischemia the rest pain is no longer relieved by standing. Intermediate degrees may lead to *numbness* of the leg either during exercise or at night.

Two other types of pain may be seen: in diabetics, shooting pains of ischemic neuropathy that follow a nerve trunk distribution may be a major complaint; and if an ischemic ulcer of the extremity or gangrene is present, pain will occur at the local site of tissue necrosis.

The history is important in determining the extent of the obstructive lesion. If only claudication is present, there is just one site of obstruction in the limb, such as an isolated occlusion or stenosis of an iliac artery, superficial femoral artery, popliteal artery, or distal vessel. On the other hand, if rest pain or numbness occurs, there are two levels of obstruction such as a combined iliac and superficial femoral occlusion, or femoral and popliteal occlusion, or proximal obstruction along with small vessel occlusion in the foot. An isolated occlusion of one segment of the artery does not ordinarily cause rest pain or numbness unless the occlusion has occurred acutely, as in the case of an embolus or trauma.

In this regard, the symptoms of acute arterial occlusion include the six P's—pallor, polar, pulseless and pain, paresthesiae, and paralysis. Arterial occlusion leads to the first three P's and ischemia of the nerves causes the second

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three. If these are present, the acute occlusion due to embolism must be differentiated from that caused by arterial thrombosis. With embolism, the onset is sudden and dramatic and the first symptom is severe pain. In the case of arterial thrombosis, the initial symptom is usually numbness or weakness of the extremity followed gradually over several hours by pain and the other symptoms.

A third possibility that must always be considered is that of a low cardiac output state, caused by cardiac arrhythmia or myocardial insufficiency, that combines with a prior long-standing arterial occlusion to produce ischemia of the extremity. The importance of this differentiation is that the embolus is an emergency that can be operated upon immediately under local anesthesia with a cure; thrombosis will involve a much more extensive procedure and hence should be approached more gradually after more information has been obtained about the extent of the lesion; and the low cardiac output state should not be operated upon at all.

Certain characteristics of the ischemia can be noted from the combination of the physical examination and observation of the extremities. The *acute insufficiency* will have the six P's outlined above. A more *gradual* occlusion will give rise to the symptoms of claudication or numbness and elevation of the extremity will produce marked pallor followed by gradual onset of protracted rubor when the extremity is placed in a dependent position. *Advanced ischemia* will lead to continual rubor of the foot and finally edema resulting from the patient's keeping the foot in a dependent position. In these cases, the "Hunting" phenomenon can be observed: the color of the foot alternates over the course of a few minutes between pallor and rubor. This results from a conflict between two normal physiological functions—vascoconstriction for control of heat loss and reactive hyperemia to meet the demands of local tissue ischemia. This phenomenon, like continuous rubor, indicates advanced ischemia.

Other details that may be encountered in the course of inspection of the foot include observation of the skin and the nails for evidence of good nutrition representing recent occurrence of the occlusion as opposed to dry thin skin, deformed nails, and absence of hair growth in the distal extremity that occurs with long-standing arterial occlusion or diffuse disease. The importance of the color of the foot has already been mentioned, and edema in association with rest pain is a bad sign. However, one must also be sure that the edema is not caused by venous insufficiency, cardiac failure, or infection in the foot. Sweating should also be searched for, since if it is observed a sympathectomy may be beneficial. Questioning the patient may reveal that sweating has been absent for a long time, particularly in diabetics in whom neuropathy has led to destruction of the sympathetic nerve function. Good venous filling in the horizontal position occurs when the arterial supply is satisfactory, and the veins are collapsed when it is deficient. Compression of the skin of the foot followed by observation of the rate of capillary refill is a useful test that gives a rough index to the adequacy of the arterial inflow.

Next, the examiner should turn to palpation of the pulses, skin temperature, and sweating. All the peripheral pulses should be felt including the temporal, carotid, subclavian, radial, aortic, iliac, femoral, popliteal, posterior tibial, and dorsalis pedis, because arteriosclerosis is a diffuse disease, and other areas of the body will probably be involved. Skill in locating pulses requires **practice** and **patience.** Many errors will be made early in one's experience, and one can only persist in attempting to improve his skill. The foot pulses are best felt by light pressure, and the vessel may be located by passing the finger lightly over the skin and locating the bump in the skin produced by the artery. The popliteal pulse is perhaps the most difficult to find, particularly in obese individuals. The fingers of both hands must be placed together, the knee slightly flexed, and strong pressure applied in the midline. This pressure should be held for about ten seconds and then slowly released while feeling for the pulse.

The *timing* of the pulses is important, as well as the volume of the pulse. Ordinarily, the radial and femoral pulses are synchronous, but if the femoral pulses are found to be weak and

delayed, a complete occlusion of the iliac artery on that side is indicated, along with good collateral flow. On the other hand, a weak pulse with no delay signifies stenosis of the proximal artery on the involved side. The volume of the pulse should be compared to normal and also to the pulse on the other side.

The *size* of the vessels is also important, since aneurysmal dilatation of the vessels is a diffuse disease; and most patients with an abdominal aortic aneurysm will have very wide femoral and popliteal pulses and, in fact, may have aneurysms of these vessels as well. At the same time that the pulses are being recorded, the temperature of the extremity is felt and note taken of the level at which any change in temperature occurs: ordinarily, the temperature change is found about one joint below the level of the occlusion. Sweating of the foot is not only observed visually, but can be suspected by drawing the fingers across the foot and looking for the presence of friction associated with the fluid.

After inspection and palpation, the examiner uses his stethoscope to listen for a bruit, which is a systolic murmur that indicates turbulent blood flow in the vessel underneath and identifies a narrowed segment. One ordinarily listens over the carotid, subclavian, renal, iliac and femoral arteries, and the abdominal aorta, but at times useful information will also be obtained by auscultation over the distal vessels such as the superficial femoral. The absence of a bruit signifies either no significant narrowing of the vessel, in which case a good pulse will be present distally, or complete occlusion with a weak and delayed or absent distal pulse. A loud bruit represents moderate stenosis, and a faint bruit will indicate either very minimal stenosis, which will be accompanied by a good distal pulse, or else very severe stenosis with a weak distal pulse. A long, high-pitched, musical bruit usually indicates stenosis of at least 90 per cent or more of the lumen.

Along with the examination of all of the vessels, the general health of the patient should be investigated. Arteriosclerosis is a generalized disease and, hence, will involve other areas of the body as well as the leg. Consequently, a search by history and physical examination must be made for evidence of cerebral, coronary, renal and mesenteric insufficiency.

In the case of *cerebral* vessels, bruits may be heard over the carotid or subclavian vessels and the blood pressure may differ in the two arms. The history will indicate intermittent episodes of numbness or weakness of one side of the body, blurring of vision in the opposite eye, or episodes of vertigo, diplopia, blindness, or syncope.

With the *coronary* vessels, a history of angina or myocardial infarction may be present and the chest x-ray and electrocardiogram will be employed to look for occult disease.

Renal artery stenosis will be indicated by the presence of hypertension; and if this is present, a timed intravenous pyelogram and renogram should be done as screening tests before an aortogram.

Mesenteric arterial insufficiency should be suspected with a history of weight loss, unusual abdominal pain, and diarrhea signifying the malabsorption syndrome. Finally, a smoking history and laboratory workup for diabetes should be included.

Special Procedures

With this examination, the physician should be able to localize the lesion and predict its extent. An arteriogram is only indicated to plan an operative procedure or to define an unusual or uncertain clinical picture. Thus, it is required in all cases of femoral artery disease where operative intervention is to be undertaken, but need not be done unless an operation is planned. Before any operative procedure on the terminal aorta, an intravenous pyelogram is always obtained to be sure both kidneys are present and functioning. If no function is found on one side, or if the pyelogram indicates delay in function or a smaller kidney on one side, an aortogram is performed looking for significant disease in a renal artery, so that it can be repaired at the same time. In our experience, an aortogram is rarely required in the case of aorto-iliac disease, although the tyro will employ it more often until he gains the necessary clinical skill. This point is discussed more fully in the examples that follow.

Oscillometry and plethysmography are almost never employed, particularly when the

physician has developed a certain degree of clinical skill. Although these are primarily research tools, they are non-invasive techniques for obtaining objective records to compare the pre- and post-operative situations. Similarly, they may be used to document the results of nonoperative treatment of arterial lesions.

Clinical Examples

To illustrate how this clinical assessment aids in the management of the patient, let us first consider the individual who has normal femoral pulses. If his symptom is only claudication, he will have just one level of obstruction, probably in the superficial femoral artery. One should look very carefully for a weak foot pulse, and if this is present, particularly with good nutrition in the foot, then the obstruction is most certainly localized.

Is an operation indicated? Our general rule is that we do not operate on claudication due to femoral artery obstruction unless the symptom is extremely disabling or annoying, or interferes with the patient's work. We assure him that he is not likely to lose his leg due to gangrene and recommend medical treatment including weight loss, reduction of elevated serum lipid levels, avoidance of smoking, and exercise to develop the collateral circulation. A femoral arteriogram is not done unless an operation is to be undertaken. On the other hand, if the patient has rest pain or numbness, an operation is always recommended since these distressing symptoms are signs of advanced ischemia, and tissue breakdown will occur shortly. In this situation, the arteriogram is necessary to delineate the proximal and distal extent of the lesion and plan the operative approach. Of course, one must always be sure that the numbness is not caused by neuropathy rather than vascular insufficiency before he pursues this course.

In the case of the patient who has absent or weak femoral pulses due to iliac artery obstruction, it is most important to determine whether he has claudication or rest pain. If he has claudication only, the color and nutrition of the foot will be good and careful examination may reveal weak foot pulses. In this case, the distal vessels are open and a femoral arteriogram is not required, since operation will only involve the aorto-femoral distribution. Once again, operation is recommended only in cases where the claudication is annoying or disabling, and the patient is assured once again that gangrene is certainly not inevitable in this situation. If the patient has weak femoral pulses with a bruit over the distal iliac or femoral arteries, he has severe stenosis of the iliac arteries and, in this case, the femoral pulse may come and go with changes in the patient's blood pressure. A weak femoral pulse with a delay in its appearance time as compared to the radial pulse indicates complete occlusion of the iliac vessels with excellent collateral circulation around the occlusion.

In contrast to the individual with claudication alone, the patient with Leriche syndrome who has rest pain or persistent numbness in the extremity not only has an iliac occlusion but also some distal obstruction in the superficial femoral or popliteal artery; and, in this case, operation is definitely required. An aortogram is not done unless indicated on the basis of hypertension, the intravenous pyelogram, or the renogram as previously outlined. The femoral artery region is carefully palpated preoperatively to determine whether the artery is hard or soft. A hard firm femoral indicates thrombosis of the common femoral artery; and the surgeon must determine whether there is runoff before he opens the abdomen, so the operation begins by exploration of the femoral artery to be sure that the profunda femoris vessel is patent. This information cannot be obtained from an aortogram in the presence of iliac and common femoral artery obstruction and, hence, the need for exploration.

If the common and the profunda femoris vessels are occluded, a second incision is made just above the knee to explore the popliteal artery in this region. If this artery is also occluded and the patient's only symptom is numbness, a sympathectomy is performed. On the other hand, if rest pain or threatening gangrene is present, the popliteal artery below the knee should be explored before abandoning the procedure. If it is found to be open, a graft from the aorta to the popliteal artery can be undertaken in selected cases to try to save the limb.

In a similar situation, that is Leriche syndrome with rest pain, but a patient in whom palpation of the femoral artery reveals that the artery is soft or not palpable, the abdomen is opened first and the distal iliac vessels are carefully palpated. If they and the vessels behind the inguinal ligament are soft, an aorto-iliac graft can be performed. If there is extensive disease in the distal external iliac artery, particularly behind the inguinal ligament, a second incision over the femoral artery is made and an aorto-femoral graft performed.

Operation is therefore performed in selected cases of the Leriche syndrome for claudication that is annoying or interferes with work, and is recommended in all cases with rest pain or numbness. Operation solely for the relief of impotence associated with the syndrome should not be undertaken, however. While it is true that restoration of flow to the internal iliac arteries may improve the blood supply, the necessary dissection around the terminal aorta and common iliac vessels will interrupt the nervi erigentes and hence disturb the reflex autonomic control, so that whatever is gained by increased blood flow will be lost by destruction of these pathways.

Sympathectomy or Not

The surgeon is often faced with the question of whether a sympathectomy will be effective or not. It has been suggested that a paravertebral sympathetic block should be tried to answer this problem. However, if no response occurs, the surgeon still does not know whether this was because the needles were not properly positioned or the sympathetic nerves could not respond. An epidural block will give the answer, but usually the information can be obtained more simply by observation of the foot.

If sweating is present, sympathectomy will be beneficial; whereas if it is absent and the foot remains dry, particularly in a diabetic, it will have no effect. In uncertain cases, sweating may be provoked by covering the abdomen with a heating blanket and giving the patient hot fluids to drink, thus stimulating sweating over the whole body. In very borderline cases, it may be necessay to use iodine and starch on the foot to determine whether any sweating occurs in the extremity.

In what clinical situation will sympathectomy be employed? We perform it in patients who are undergoing arterial surgery for rest pain, and also with most femoral artery grafts. since these are almost always done in patients with distal disease and rest pain or numbness. We also use it with aorto-femoral grafts when distal disease is present as indicated by the findings at the time of operation or the prior symptoms of numbness or rest pain. If the distal vessels are patent as determined by the appearance of the foot and the presence of weak foot pulses, a sympathectomy is not done. Sympathectomy alone is unlikely to have any effect on claudication, but occasionally does relieve rest pain, particularly when combined with the usual conservative measures including elevation of the head end of the bed, oral quinine at bedtime, wearing wool sox to bed, and occasionally vitamins B^{1} and B^{12}.

Problems with Diabetics

The patient with diabetes and arterial insufficency frequently presents with a paradoxical situation. He may have gangrene with foot pulses still present, or he may have pain combined with numbness. Such a contradictory situation arises because of the common involvement of the distal small vessels in the diabetic process, but this generalization should not deter the surgeon from looking for and treating significant proximal lesions to improve the blood flow into these distal areas. Severe pain, in spite of loss of sensation, occurs because of diabetic neuropathy; and this is extremely difficult to relieve even with arterial reconstructive surgery, sympathectomy, and vitamin therapy.

Neurotropic lesions caused by loss of deep sensation include skin ulceration, particularly over the metatarsal heads, and general destruction of the joints themselves, the so-called Charcot joint. In this condition, extensive destruction of the bones and joints can occur with relatively little pain.

Surgical treatment in the patient with diabetes consists of restoration of proximal inflow into the region, combined with local surgery in the form of amputation and debridement of gangrenous areas. Because of the lack of sensation, amputation of toes and drainage of

plantar space infections can often be carried out on the ward without an anesthetic, and once the area has been adequately drained, antibiotic therapy and careful control of the diabetes may allow salvage of the foot. The role of sympathectomy in the treatment of the diabetic patient has already been discussed, but in general it is indicated only when sweating can be demonstrated. In such situations, it improves the blood supply to the skin and stops sweating, thus reducing the chance of breakdown in macerated skin in the toes, and hence preventing the lesion that initiates infection and gangrene.

Irreversible Changes

A very difficult question that the surgeon occasionally has to answer is that of determining when it is too late to perform reconstructive arterial surgery. Certainly numbness and paralysis of the extremity do not in themselves indicate that this unhappy state has been reached, since these can be seen in an acute arterial occlusion from an embolus, and recovery of the nerve function occurs when normal flow is restored.

The most valuable clinical finding is that of rigidity of the muscles in the involved area leading to fixation of the joints. Since the distal part of the leg is most involved, this is most commonly seen first as plantar flexion of the foot that cannot be overcome by forcible attempts to dorsiflex the ankle joint. The rigidity of the calf muscles is, in fact, rigor mortis. If the surgeon is still in doubt, he can wash the involved area and incise the skin and fascia without an anesthetic to expose the muscles that will not contract when pinched, thus confirming the death of the tissues. Under these conditions, attempts to restore inflow are useless, and may even be harmful since the distal vessels are thrombosed and restoration of flow through the main channels may result in absorption of toxic products from the necrotic muscle and lead to myoglobinuria and renal shutdown. If flow has been restored to a borderline leg, the urine output must be watched extremely closely in the first few hours. If the volume of the urine decreases and its color turns dark brown or black, immediate emergency amputation of the extremity must be performed to prevent renal tubular necrosis. The change in the appearance of the urine, both in volume and color, after amputation is often dramatic.

Summary

Arterial insufficiency is an extremely common problem facing physicians today. The localization and extent of the lesions can be easily determined by simple clinical examination, and operative therapy can be recommended or planned on this basis. Arteriograms are always indicated in the femoral region, but seldom necessary in aorto-iliac disease unless there is some evidence of renal artery involvement. A judicious selection of therapy including medical measures to improve the collateral circulation and limit the progression of the disease, sympathectomy, endarterectomy, and bypass graft will bring a satisfactory result in most patients if the proper criteria are followed.

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Changing Views Regarding Hodgkin's Disease†

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Current views regarding Hodgkin's disease are reviewed in the light of recent progress and knowledge from "total staging" and current views of management. The condition may now be considered potentially curable.

WE are now witnessing tremendous advances in our understanding of Hodgkin's disease, into methods of assessing the extent of disease, and of how to treat patients afflicted with this condition. There has been a radical alteration of therapeutic philosophy, and one may now regard the condition as one of the malignant conditions which is potentially curable if properly and adequately treated. The previous pessimistic view that all lymphoid neoplasms ultimately prove fatal is gradually being replaced by a more optimistic one. In fact, at the present time, a pessimistic view can hardly be justified.

Our understanding of the nature, pathogenesis, clinical course, and management of Hodgkin's disease and other lymphomas has also changed greatly in the last decade and has been based on four major developments. The first and most important has been the development and wide application of lymphangiography in the routine assessment of afflicted patients. The second has been the application of techniques of "total staging" in selected series of patients wherein laparotomy, splenectomy, retroperitoneal lymph node biopsies and liver biopsies have been used to assess patients with even minimal disease. The third has been the development of methods using several potent cancer chemotherapeutic agents ("combination chemotherapy") to treat patients with even advanced disease. The fourth and most important has been the application of wide field irradiation to patients with the disease, even in its more advanced clinical stages. These will be discussed separately.

Staging of Hodgkin's Disease

Peters,[1] in 1950, introduced a staging system which has been widely applied, and in more recent years has been substantially extended in its application to the disease. The Rye Conference in 1965 recommended the following staging definitions.[2]

Stage I —Disease limited to one anatomic region (I_1) or two contiguous anatomic regions (I_2) on the same side of the diaphragm.

Stage II —Disease in more than two anatomic regions or in two non-contiguous regions on the same side of the diaphragm.

Stage III —Disease on both sides of the diaphragm but not extending beyond the involvement of lymph nodes, spleen and/or Waldeyer's ring.

Stage IV —Involvement of the bone marrow, lung parenchyma, pleura, liver, bone, skin, kidneys, gastrointestinal tract or any tissue or organ in addition to lymph nodes, spleen, or Waldeyer's ring.

All stages are additionally subclassified A or B to indicate the absence or presence of certain systemic symptoms. The presence of unexplained fever, night sweats, and pruritus places a patient in the B category. Weight loss, weakness, anemia, and elevated sedimentation rate do not necessarily relegate a patient to the B category.

It should be noted that localized extranodal or lymphatic disease cannot be staged by the above scheme. In fact, both Peters and others[3] have reported favorable prognosis for localized disease of lung or gastrointestinal tract and other extranodal sites.

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Evaluation and Total Staging

The importance of accurate clinical staging demands that evaluation be thorough and accurate. Careful history taking should take note of the systemic symptoms noted above. A complete physical examination should include palpation of all lymph node sites, and visualization of the tonsillar fossa and nasopharynx. Radiographic examination should include chest x-ray, bone survey, intravenous pyelography, and lymphangiography. In the presence of hilar lymphadenopathy, whole lung tomography is valuable. Complete blood counts and liver function tests are also valuable.

Importance of Lymphangiography

Most important in the evolution of concepts regarding lymphomas and Hodgkin's disease was the lymphangiogram (LAG). The realization that some early clinical stages of the disease manifested abnormal LAG's (Figure 1) began to distinguish a group of patients previously considered early, as actually being more advanced in their disease extent. Lee[4] reported Stage I clinical disease with abnormal LAG's indicating actual Stage III disease. Patients with groin nodes or B symptoms often had radiographically abnormal nodes. Lee noted that about 25 per cent of clinical Stage I disease had abnormal lymphangiograms thus making them Stage III. About half of clinical Stage II disease were positive and therefore actually Stage III. In addition, about 10 per cent of negative LAG's may in course of follow-up eventually become positive.

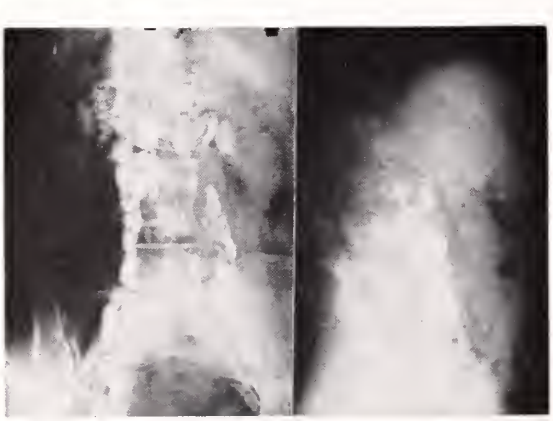


Figure 1. Lymphangiogram showing involved retroperitoneal nodes. These brilliant investigations carried out by Diagnostic Radiologists were important to the evolution of our current understanding of the staging and progression of the lymphomas.

The widespread use of lymphangiography led to a greater appreciation of the natural history of the disease and of the early involvement of retroperitoneal nodes. It led naturally to the application of more direct means of proving the presence or absence of early retroperitoneal disease. We are presently in the midst of an intensive evaluation of the role of exploratory laparotomy, liver biopsy, splenectomy, and multiple biopsies of periaortic, mesenteric and iliac nodes, and histologic study of tissue obtained by this means to totally stage the disease.[5]

TABLE I

Results of Laparotomy with Splenectomy and Retroperitoneal Node Biopsy (University of Minnesota Experience)

		Subdiaphragmatic Disease	
		Number Positive	%
Positive LAG	4/22	4/4	100
Negative LAG	18/22	6/18	33
Spleen Involved	9/22	(Number Enlarged 1/9)	41

Table I presents the results of this author's personal experience in the application of total staging to a series of 22 cases of Hodgkin's disease at the University of Minnesota Hospitals. The data show that about 41 per cent of patients with Stage I and II disease will show either microscopic or gross involvement of the spleen or retroperitoneal nodes. Of this group, 18/22 (82 per cent) had LAG's which were considered to be within normal limits by the diagnostic radiology department. Of this group, 6 (or 33 per cent) were found to have spleen or retroperitoneal disease positive for involvement by Hodgkin's disease. We can conclude that a negative study does not exclude involvement. On the other hand, the obviously positive LAG's were in each instance confirmed microscopically.

Since the exploratory laparotomy represents a far more direct method of patient evaluation than lymphangiography, one may ask what the importance of LAG presently is.

First, it permits evaluation of a region presently accessible by no other radiographic means. Both the intravenous pyelogram and the inferior vena cavagram are far less sensitive examinations.

Second, it selects out the group of patients with obvious abnormality and clear-cut retroperitoneal disease. Additional laparotomy and exploration is of academic interest and will provide valuable information regarding the liver and spleen, however, it may not be essential to further patient management.

Third, it selects a group with minimal disease involvement in whom the surgical abdominal evaluation provides essential information for subsequent therapeutic management. In the presence of abnormality, valuable anatomic information regarding the sites and extent of disease can be obtained to permit the radiotherapist greater precision in directing his beams. Finally, it is a method of following the status of retroperitoneal nodes for extended periods, sometimes over many months. Our current understanding of lymphomas would not be possible without lymphangiography.

Importance of Pathology

The histologic pleomorphism has led to great controversy regarding pathogenesis and the view that a granulomatous inflammatory disease underlies the disease process. The presence of lymphocytes, histiocytes, fibrotic bands, plasma cells, eosinophiles and multinucleate reticulum cells, the so-called Reed-Sternberg cells, have led to confusion concerning the nature of the disease. Current views support the neoplastic nature of the disease with reports of a characteristic chromosome aberration in certain cases. To date, the diagnosis can be made only if Reed-Sternberg cells are present.

Lukes and Butler and Lukes *et al*[6, 7] have extended the earlier histopathological classification of Jackson and Parker which attempted to predict the course of the disease based upon paragranuloma, granuloma, and sarcoma designations.

Four histological patterns with different behavioral patterns have been described. They are lymphocyte predominance (LP), nodular sclerosis (NS), mixed cellularity (MC), and lymphocyte depletion (LD).

When these criteria were applied to retrospective reviews of patients, it appeared to correlate with the course of the disease. However, as more and more sites began to be sampled in a single patient, using current total staging methods, it has become clear that a single patient may manifest different histological patterns in different sites.

There is also not complete agreement between pathologists with regard to classification. Nevertheless, nodular sclerosis and frequent mediastinal involvement, and abdominal involvement with lymphocyte predominance and mixed cellularity forms appears to emerge. Nodular sclerosis is the largest histologic group, spreads in a more contiguous manner, and follows a more benign course. Multicentric disease is more frequent with mixed cellularity and lymphocyte depletion types.

It is also becoming evident that the histological features of Hodgkin's disease in sequential biopsy material remain constant over long periods of observation. The nodular sclerosing type shows the greatest persistence (92 per cent), and progression usually advances from more benign to more malignant forms. Surprisingly, lymphocyte predominance showed a far greater instability in pattern than the NS variety.[8] Additional studies of this type should provide much greater insight into histological "progression" and about multiple patterns in the same patient, as well as their prognostic significance.

Radiotherapy of Hodgkin's Disease

The effectiveness of radiation therapy in the long-term local control of Hodgkin's disease has been appreciated for many years. It has led currently to an aggressive wide-field radiation approach to all except the most advanced stages of this disease.[9] The treatment fields and treatment mode are best determined by total staging of nodal and visceral disease, using where indicated the technique of laparotomy with retroperitoneal node biopsy, splenectomy, and liver biopsy.

It is now clear that about one-third of early disease will have subdiaphragmatic involvement by the application of total staging techniques to the staging of afflicted patients. Total nodal irradiation of Stage I and II A patients

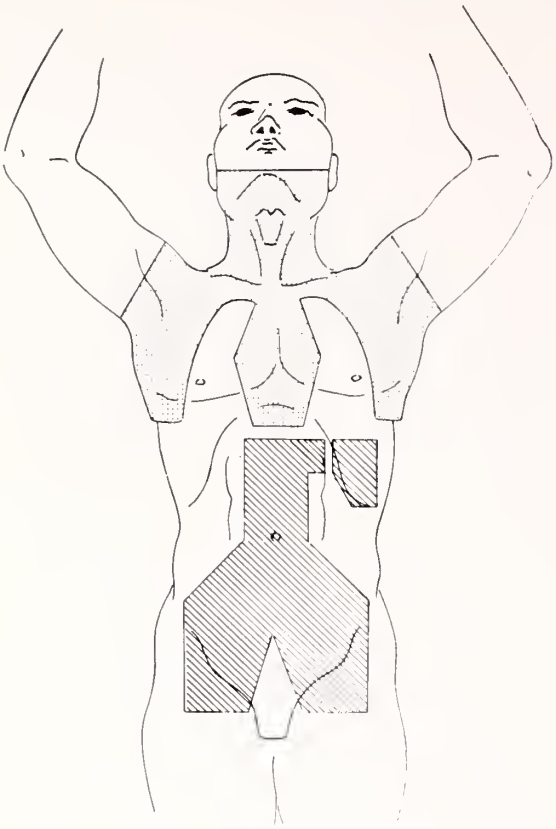


Figure 2. Radiotherapeutic fields in Hodgkin's disease. Upper mantle extends from mastoid tips to xiphoid. Lower field may include splenic pedicle or spleen. These irradiation fields are used commonly in the radiotherapy of Hodgkin's disease.

staged by methods less (Figure 2) complete than those currently followed have shown that excellent survival results are observed.[10] Whether it is necessary to irradiate all patients in this manner or only those with Stage III by total evaluation is a question yet unanswered by prospective study. Present evidence suggests that the Stage III A disease will have a favorable clinical course following radiotherapy.[10] If all tissue studied below the diaphragm are negative, it is probable that upper mantle therapy alone will suffice and yield curative results especially for the NS histological type.

The current reports that radiation therapy can cure Hodgkin's disease have led to wide application of such therapy to patients with the disease. Kaplan has analyzed data indicating a dose-dependence of local tumor control as a function of absorbed dose.[11] At the University of Minnesota Clinic, early experience with mantle therapy was associated with a very high incidence of recurrences in the treated field. A critical analysis of this experience led to much more precise techniques of treating patients with the disease, and the complex fields required for proper radiotherapy.[12, 13, 14] Individualized lung shields were constructed for each patient[13] and dosimetry carefully analyzed. A dramatic improvement in tumor control was shortly apparent, although only time will tell whether the patients have been actually cured of their disease.

This experience emphasizes the need for careful and individualized radiotherapy by specialists aware of all the problems attendant in treatment, whether carried out with Cobalt 60, linac or other forms of megavoltage equipment. It is essential to avoid overlap of fields, and to shape each field to encompass as carefully as possible, regions of disease involvement. Overlap of fields is most hazardous over the spinal cord, but lungs, heart, liver, kidneys and thyroid are all sensitive to high doses of radiation. Retreatment is most hazardous and should be carried out only by an experienced radiotherapist.

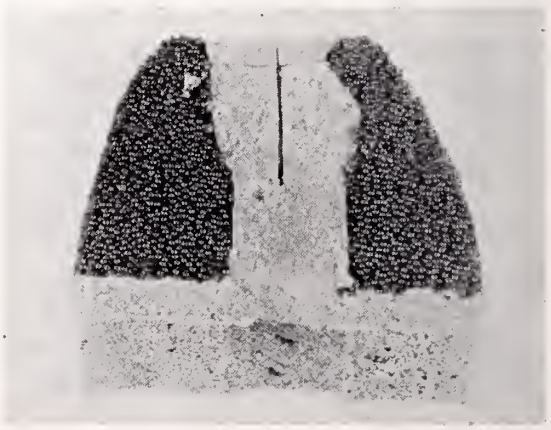


Figure 3. Individually constructed contoured lung shield for mantle therapy. Courtesy of Edwin Van Arsdale, R.T., mold technologist, UKMC. The block, individually constructed, is shaped to conform to the divergence of the beam, and contains lead shot in thermoplastic.[13]

Kaplan has pointed out the significance of the relapse-free interval after therapy.[15] He noted that nearly all of the relapses occurred during the first five years, and pointed out that patients that were relapse-free at that time had less than a five per cent chance of recurrence. These considerations reemphasized the need for careful therapeutic management at the first encounter. In the University of Minnesota experience, most of those that recurred progressed ultimately to more advanced disease. Our studies place a physical parameter to the histologic one for relapses in Hodgkin's disease.[16]

Chemotherapy of Hodgkin's Disease

Four potent categories of chemotherapeutic agents are now available for use against Hodgkin's disease. These include the alkylating agents such as nitrogen mustard, chlorambucil, cyclophosphamide (Cytoxan), and thiotriethylenephosphoramide (THIOTEPA). The periwinkle alkaloid vinblastine (Velban) is well tolerated intravenously as another category of drug. Procarbazine (Natulan) is still another drug which has been shown to be effective as an antitumor agent. Steroids are useful in that they produce a sense of well-being, stimulate the marrow, and may produce regression in some patients with disease. Combination chemotherapy is now being carried out following the MOPP program (mustard, oncovin, procarbazine and prednisone), since these are a number of chemotherapeutic modalities capable of producing response in patients with Hodgkin's disease, and do not overlap on bone marrow or mucosal toxicity.[17] The use of these potent agents have greatly improved the management of advanced Hodgkin's disease and have been combined with radiotherapy in the treatment of the higher stages with the aim of cure. To date, the aim of cure using drugs *alone* has not been supported by clinical experience.

Anergy of Hodgkin's Disease

Anergy or the absence of skin reactivity to a standard tuberculin skin test has long been recognized as a feature of active Hodgkin's disease. Schier *et. al.*[18] found that tuberculin anergy was but one feature of a general unresponsiveness and inability to mobilize a delayed hypersensitivity response. This type of response is lymphocyte mediated presumably from cells derived from thymic origin. In contrast, humoral or antibody responsiveness is not altered nor is there clinical susceptibility to intercurrent bacterial infection such as furunculosis, sinusitis, or pharyngitis. The deficiency of the immunological system in Hodgkin's disease is a failure of delayed hypersensitivity reactivity.[18] However, the lymphocyte count is normal or only slightly depressed except in the more advanced and treated cases where profound deficits occur. There appears to be an abnormality of lymphocyte functions which becomes more profound with advanced and active disease.

Conclusion

Radically changing views regarding Hodgkin's disease have taken place in the last decade. This condition previously considered progressive and fatal may now be considered as one of the more treatable diseases by appropriate therapies. High quality radiotherapy using wide field techniques have produced sustained, long-term remissions of disease such that the optimistic use of the term "cure" is now appropriate. Profound alteration of the delayed hypersensitivity reactions in afflicted patients with active disease indicates that immunologic deficits are an unusual feature of the disease state, affecting the thymus-derived cell immunological system.

The management of Hodgkin's disease has

become a team problem requiring the participation and close cooperation of surgeons, internists, diagnostic radiologists, pathologists and radiotherapists. The quality of patient care will be optimal where this team of specialists closely coordinates their efforts in the managements of patients afflicted with this disease. "Total" staging of afflicted patients is useful to determine extent of disease and optimized planning of therapy can be a result of such an approach.[19, 20]

References

1. Peters, M. V.: A Study of Survivals in Hodgkin's Disease Treated Radiologically. *Am. J. Roent. 63*:299, 1950.

2. Rosenberg, S. A., *et al:* Report of the Committee on the Staging of Hodgkin's Disease. *Cancer Res. 26*:1310, 1966.

3. Fuller, L. M.: Results of Large Volume Irradiation in the Management of Hodgkin's Disease and Malignant Lymphomas Originating in the Abdomen. *Radiol. 87*:1058, 1966.

4. Lee, B. J.: Correlation between Lymphangiography and Clinical Status of Patients with Lymphoma. *Cancer Chemotherapy Reports 52*:205, 1968.

5. Rosenberg, S. A. and Kaplan, H. S.: Hodgkin's Disease and Other Malignant Lymphomas. *Calif. Med. 113*:23, 1970.

6. Lukes, R. J. and Butler, J. J.: The Pathology and Nomenclature of Hodgkin's Disease. *Cancer Res. 26*:1063, 1966.

7. Lukes, R. J. *et al* Hodgkin's Disease Symposium: Report of the Nomenclature Committee. *Cancer Res.* 26:1311, 1966.

8. Strum, S. B., and Rappoport, H.: Interrelations of the Histologic Types of Hodgkin's Disease. *Arch. Path. 91*:127, 1971.

9. Kaplan, H. S.: Role of Intensive Radiotherapy in the Management of Hodgkin's Disease. *Cancer 19*:356, 1966.

10. Peters, M. V.: Changing Concepts in Radiotherapy for the Lymphomas. Leukemia Lymphoma, Proceedings of the University of Texas, M. D. Anderson Hospital, Clinical Conference on Cancer. Yearbook Publishers, Page 261, Chicago, Illinois, 1970.

11. Kaplan, H. S.: Evidence for a Tumoricidal Dose Level in the Radiotherapy of Hodgkin's Disease. *Cancer Res. 26*:1221, 1966.

12. Maruyama, Y. and Khan, F. M.: Blocking Considerations in Radiotherapy of the Mantle Field. *Prog. Rad. Soc. North America,* Page 86, 1970.

13. Maruyama, Y., Moore, V. C., Burns, D. J., and Hilger, M. T. J.: Individualized Lung Shields Constructed from Lead Shot Embedded in Plastic. *Radiol. 92*:634, 1969.

14. Maruyama, Y., Khan, F. M. and Burns, D. J.: Variable Block-Surface-Distance (BSD) for Adjustment of Shadow Size in Mantle Therapy. *Am. J. Roent. 111*:382, 1971.

15. Kaplan, H. S.: Prognostic Significance of the Relapse-Free Interval After Radiotherapy in Hodgkin's Disease. *Cancer 22*:1131, 1968.

16. Johnson, R. E., Thomas, L. B., and Chretien, P.: Correlation Between Clinicohistologic Staging and Extranodal Relapse in Hodgkin's Disease. *Cancer* 25:1071, 1970.

17. DeVita, V. T., Serpick, A. and Carbone, P. P.: Combination Chemotherapy of Advanced Hodgkin's Disease: The NCI Program *Proc. Am. Assoc. Cancer Res.* 6:15, 1965.

18. Schier, W. W., Roth, A., Ostroff, G., Schrift, M. H.: Hodgkin's Disease and Immunity. *Am. J. Med. 20*:94, 1956.

19. Glatstein, F., Guernsey, J. M., Rosenberg, S. A., and Kaplan, H. S.: The Value of Laparotomy and Splenectomy in the Staging of Hodgkin's Disease. *Cancer 24:* 709-718, 1969.

20. Kaplan, H. S.: On the Natural History, Treatment and Prognosis of Hodgkin's Disease. Harvey Lectures 64: 215, 1969.

Mucosal Antrectomy

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This paper discusses another technique advocated for the treatment of peptic ulcer disease. Although physiologically founded, some of its shortcomings have been indicated and discussed.

In 1965 Kirk[1,2] developed and described a new technique of affecting an antrectomy by dissecting its mucosa completely, thereby eliminating its functional capacity while at the same time preserving its motility. This he called mucosal antrectomy. Since 1965, he has employed this procedure in at least 68 patients with apparently satisfactory results.[3]

Most recently Grassi[4] reported on 23 patients in whom this procedure was performed, again with seemingly very good immediate results. Although both series are quite limited in numbers and time lapsed since the first execution of the procedure, immediate post-gastrectomy complications have been very slight indeed.

Control of acid secretion appears to be easily accomplished. Of course, this procedure is always accompanied by a vagotomy. Normal peristaltic activity appears to return without much delay (probably somewhat longer than in the conventional antrectomy). The reservoir capacity of the stomach is, of course, not affected significantly.

If one judges from the above cited reports, the determination of antral surface is seemingly facilitated and easily defined by the combined employment of Congo Red and the pH meter using a glass electrode.

The procedure further eliminates duodenal dissection, confrontation of major vessels, and maintains near normal gastroduodenal continuity. The many favorable features of the procedure speak highly for its recommendation.

It is, however, much too soon to draw definite conclusions regarding this procedure. It is our feeling that if mucosal antrectomy does not show itself to be as effective as the most commonly employed procedures, then its place in the treatment of duodenal ulcer is questionable. What might be of greater interest is its affect on controlling the benign gastric ulcer patient. Here, indeed, if results show themselves to be worthwhile, it could play a very important role. The many advantages over pyloroplasty and gastroenterostomy in the treatment of gastric ulcer are quite apparent.

A question that must be answered is precisely whether all proximal antral mucosa must be removed in order to adequately treat the benign gastric ulcer patient. That this is not always accomplished in the conventional antrectomy is quite clear. That it is not necessary to remove the antrum in the treatment of gastric ulcer is also clear, since gastroenterostomy and pyloroplasty will cure most, but not as effectively or with less recurrence as the conventional antrectomy.

A most agreeable result of mucosal antrectomy is restoration of gastric motility in a fashion very much like the normal stomach. Gastric emptying is usually somewhat increased. Antral motility is, of course, greatly concerned with gastric emptying. However, both of the aforementioned authors cut across the pyloric ring anteriorly in a fashion similar to the conventional pyloroplasty. Whether it would not be more physiologic to leave this intact and execute the mucosal antrectomy has apparently

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not been attempted, even though mucosal resurfacing might prove more difficult. This might further lessen the chance of biliary regurgitation bathing residual proximal antrum inadvertently left behind.

The procedure entails suturing duodenal mucosa to the acid producing mucosa of the stomach. This fact demands a complete vagotomy, for not to do so would greatly increase the chances of duodenal ulceration.

Time will only tell whether mucosal antrectomy has value in the treatment of gastric and duodenal ulcer disease. It is well founded physiologically, especially in the treatment of gastric ulcer.

References

1. Kirk, R. M.: Mucosal antrectomy with vagotomy in the treatment of duodenal ulcer. *Brit. J. Surg.*, 52:604, 1965.

2. Kirk, R. M.: Mucosal antrectomy in the treatment of peptic ulcer. *Proc. Royal Soc. Med.*, 59:571, 1966.

3. Kirk, R. M.: Gastric mucosal resection. 8th Congr. Int. Gastroent. Prague, July 7-13, 1968.

4. Grassi, G.: Mucosal antrectomy in the treatment of gastric and duodenal ulcer. (Title translated) *Chir. Gastroent.* 3:3, 1969.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Medical Progress

Surgery for Coronary Artery†

KAZI MOBIN-UDDIN, M.D., J. KENT TRINKLE, M.D., and
LESTER R. BRYANT, M.D.

Aorto-coronary vein bypass grafts have opened a new era in the management of coronary artery atherosclerosis. Patients with angina pectories and/or congestive heart failure can now be offered more than symptomatic treatment.

WITH the advent of aorto-coronary saphenous vein bypass grafting, a new era has begun in the treatment of atherosclerotic coronary heart disease. By anastomosis of a segment of saphenous vein to the ascending aorta proximally, and to a coronary artery distally, partial or complete occlusions of the coronary arteries may be bypassed. Because of the great frequency of coronary artery disease and the obvious effectiveness of the procedure in restoring myocardial blood flow, the operation is being performed with increasing frequency.

Coronary artery disease is endemic. Present statistics indicate that at least 20 per cent to 30 per cent of American men beyond 40 years of age already have or will develop significant atherosclerotic coronary heart disease. In the USA, 1,500 deaths occur each day from this disease.

Coronary artery disease passes through three principal stages. Stage I is the asymptomatic phase when coronary atherosclerosis develops slowly (20-30 years). Stage II is the symptomatic phase when myocardial infarction or angina develops. The mortality is 40 per cent. The course of Stage III is variable. Some live for years without disability, while others are disabled by angina or congestive heart failure. Re-infarction involves a return to the prognosis of the acute stage. Medical therapy may afford considerable symptomatic relief to the patient with angina, but the long-term prognosis remains poor. The average survival after the onset of angina is four years. The average four-years mortality rate after the onset of angina is 30-40 per cent.

For intelligent planning of treatment for patients with atherosclerotic coronary artery disease medical or surgical, it helps the clinician to have the information regarding the site of obstruction and the severity of coronary atherosclerosis. It will not be enough merely to demonstrate the anatomical lesions of coronary artery disease; but its affects on the ventricular function must be studied—namely 1) the contractility of the heart, 2) left ventricular end-diastolic pressure and its response to exercise.

Criteria for Selecting Patients for Further Studies

1. Patients under 60 years of age with significant angina.
2. Patients with intractible angina and/or congestive heart failure.
3. Young patients with previous history of one or more myocardial infarctions without angina.

Indications for Surgery

1. Increasingly disabling angina pectoris.
2. Progressive or recurrent episodes of congestive heart failure. Angina may or may not be present in these patients.
3. Recurrent myocardial infarction without angina.
4. Pre-infarction syndrome—patients with pain suggestive of myocardial infarction in

†*Department of Surgery, Division of Cardiothoracic Surgery, University of Kentucky College of Medicine, Lexington*

whom enzymes are normal and develop T-wave inversion or ST change, or patients with marked increase in the severity of angina and ventricular irritability in whom coronary arteriography shows severe stenosis of major artery with likelihood of occlusion in the near future is an indication for emergency saphenous vein bypass grafting.

The small angiographic size of the distal arterial segment beyond the area of obstruction is not a contraindication to surgery. The ability to opacify a coronary artery beyond the area of obstruction depends upon the volume of dye injected and the rate of blood flow through collateral circulation. Invariably, coronary arteries distal to the obstruction which appeared to be of small size on angiography were found to be of large caliber at surgery.

Results

The operative mortality is low, being less than 10 per cent for patients with angina only. The hospital mortality for patients with congestive heart failure is 10-20 per cent, with a late death rate of 10 per cent. Symptomatic improvement occurs in 70-80 per cent of the patients, and there is a high degree of correlation between symptomatic improvement and patency of the grafts. The patency rate of the grafts has been reported in the range of 85 to 90 per cent. The volume of blood flow through the grafts has been considerable in the range of 40 to 190 cc per minute. Early occlusion of the venous grafts may occur if the rate of blood flow is too small—probably in the range of 15 to 25 cc per minute.

Improvement in left ventricular function has been reported following saphenous vein bypass grafting. This suggests that decreased myocardial function on the basis of ischemia can be reversed in some instances if adequate coronary flow can be established to the involved ischemic portion of the myocardium. Postoperative studies in these patients have demonstrated marked improvement in myocardial contractility and in left ventricular dynamics. In patients with extensive destruction of the left ventricle with intractible congestive failure with high end-diastolic pressures, the improvement following operation is limited.

Whether arteriolized vein grafts will or will not undergo degenerative changes that lead to calcification, thrombosis or aneurysm formation, remains to be seen; but during this relatively short period, there have been no indications that such changes will occur. Late occlusion of grafts may occur from progression of coronary atheriosclerosis or from proliferation of intima at the site of either aortic or coronary anastomosis.

Little is known of the effect saphenous vein bypass grafts will have on the natural history of coronary artery disease in terms of reduced mortality or frequency of subsequent myocardial infarction.

Surgical treatment of atherosclerotic coronary artery disease by saphenous vein bypass grafting is one of the most significant advances in cardiac surgery in the last decade. It effectively relieves angina pectoris with minimal acceptable risk.



Physicians Services and the Intermediate Care Facility

GEORGE F. BROCKMAN, M.D.*

IN the strange patchwork of enactments and amendments to the Social Security Act that comprise Medicare and Medicaid, the Congress of 1967 defined four institutions in which physicians might render service to beneficiaries of MEDICAID. In decreasing order of fullness of services, these are:

1. The acute hospital.
2. The Extended Care Facility (ECF).
3. The Intermediate Care Facility (ICF).
4. The personal care residence.

The history of the ICF Program was summarized in frank words by the Staff of the Senate Finance Committee:[1] "in a major effort to control the rapidly-rising nursing home segment of the Medicaid cost, the Committee on Finance approved . . an amendment, which authorized Federal matching for a new classification of institutional care provided in "intermediate care facilities." The amendment . . was intended to provide lower cost alternative to skilled nursing home care where intermediate care was determined to be more appropriate. . . ." The Staff further complained that some states had cunningly blanketed into ECF eligibility, many Aid to the Aged, Blind and Dependents (AABD) beneficiaries who were not, in fact, entitled to that classification. This unfairly exploited Federal matching funds available for ECF patients.

On July 1, 1971, Governor Louie B. Nunn announced that the Department of Economic Security had developed an ICF program for Medicaid beneficiaries covered by AABD in Kentucky. On July 16th, apparently as a result of an unfortunate lapse in communications, the Kentucky Nursing Home Association (KNHA) rejected this Plan. Since then, the Departments of Economic Security and Health have conducted Seminars across the State for Administrators of institutions caring for AABD dependents, explaining the Intermediate Care concept. As the Program provides financial incentives for various institutions to participate as Intermediate Care Facilities, local physicians will probably be consulted by Administrators of instutions looking toward participation.

The Kentucky Intermediate Care Program is specified in *Conditions of Participation,* 1971 Edition.[2] This is properly labeled as an "informational copy" and is a prospectus rather than the definitive regulations.

Two classes of institutions might convert, partially or *in toto* into Intermediate Care Facilities. An ECF easily meets the standards and might find the change attractive because:

a. Three days of general hospital study prior to admission of a patient is not required.

b. Registered Nurse staffing is not required.

c. Physician certification of patients would be required quarterly rather than monthly.

The Administrator of a personal care home who wishes to convert his facility to an ICF must take a long step from a boarding-house to a mini-hospital type of operation. The ICF is a treatment facility, and its residents are patients. This directly draws physicians into the operation in several areas. As outlined in *Conditions of Participation*:

Section 3. **Medical Supervision of Patients**

"a. Medical Care

(1) The intermediate care facility shall have an advisory physician or a medical advisory committee composed of at least one licensed physician who shall be responsible for advising the administrator on the overall medical management of the patients in the facility.

*Chairman, Medical Care Plans Committee, Kentucky Society Internal Medicine

(2) The administrator shall have a written program of medical services that indicates the scope of care to be provided, the policies relating to, procedures for implementation of these services.

(3) Each patient shall be under the medical supervision of a licensed physician."

The patient shall be permitted his choice of a physician, who shall visit the patient as often as necessary to assure adequate medical care; the patient must be seen by the attending physician at least every 90 days. Each patient should have a complete physical examination prior to admission. This may be an up-dated physical from a hospital, an ECF, or the doctor's office, and is to be filed within two weeks after admission. In addition to the physical examination report, the patient would have an admission summary which would include:

"a. current medical findings,

b. diagnosis,

c. summary of the course of treatment in the transferring institution,

d. orders from the attending physician,

e. orders from the attending physician shall include the level of care,

f. verification of freedom from all contagious disease."

To properly care for these patients, the facility will maintain for each a document whose description is substantially indentical to that of a patient chart in an acute care hospital. Adequate medical records would seem to require at least consultation by a trained medical record librarian.

As a program of the Department of Economic Security, full coverage payments for Intermediate Care Facility pertains exclusively to Medicaid patients. While private-pay patients may avail themselves to the Facility, there is no provision for reimbursement of this as institutional care under MEDICARE (Title XVIII-A) or under current contracts written by Blue Cross or most other health policies. Physician services rendered to AABD beneficiaries would be paid under KMAP regulations. Physician services to MEDICARE beneficiaries would be reimbursable as in home care.

References

1. Medicare & Medicaid Problems, Issues, and Alternatives, Report of Staff to Committee on Finance, United States Senate, 1967, pgs. 97-104.

2. Department of Economic Security, Bureau of Public Assistance, Capitol Annex Building, Frankfort, Kentucky 40601.

Helicopter Transportation of the Ill and Injured

Lloyd F. Redick, M.D.*

WITHIN the past few years, several articles have appeared regarding the utilization of helicopters for the transportation of the ill and injured.[1, 2, 3] The experiences and reports of the armed services in Vietnam have further served to interest the medical community in the possibility of civilian use of helicopters for evacuation of casualties from highway accidents and for interhospital transfer of patients.

Most of this information has described glowing accounts and dramatic results; and in many instances, helicopters undoubtedly contributed to the saving of life. It is estimated that of the 56,000 or more traffic fatalities per year, 20 per cent could be saved by improved care. The helicopter could perhaps contribute to this 20 per cent saving in some ways. On the other hand, there are a number of drawbacks to the use of helicopters which need to be considered. These drawbacks are the subject of this review.

Helicopter as a Flying Machine

The helicopter is the only available and practical aircraft with vertical lift capability. This ability to fly straight up is the great factor in its versatility. Takeoff and landing technically requires only enough space to clear the rotor blades with a little leeway. The helicopter's lift is supplied by the air foils of the rotor blades, and as the air becomes thinner at higher altitudes, less lift is available, and results in a maximum useful altitude of about 12,000 feet.

Top speed of most helicopters is under 130 miles per hour; although there are a few highly powered, high performance, and therefore quite expensive, models which will fly a little faster. Top speed is limited by the inherent design of the helicopter, which relies on the spinning airfoils to provide lift. As the helicopter moves forward at an increasing rate, more lift is obtained on one side, and lift is lost on the other, presenting a problem of stability at higher speeds. This effect is countered up to a point, by changing the angle of the airfoil during its rotation; this involves complex mechanical or other linkages, and in turn requires more maintenance and expense.

Weather conditions greatly influence helicopter flying. At the present time, helicopters are not licensed to fly under the instrument flight rules that apply to regular fixed-wing aircraft. Night flying is possible, as is flying in clouds, fog, rain, snow, etc.; but it requires additional instrumentation and experience of the pilot. High winds make flying difficult and takeoffs and landings dangerous.

Because of the radius of the rotors, and other factors, takeoffs and landings are limited in general to slopes of less than 20 degrees. Another practical problem, particularly at accident scenes, is the dust and dirt which may be stirred up by the airstreams of the rotors.

Helicopter as an Ambulance

The minimum internal size and space for surface ambulances has been suggested by a committee of the National Academy of Sciences-National Research Council.[4] Few civilian operational helicopters of modest cost can approach this ideal, or can afford the space needs for resuscitation and other emergency aid equipment and supplies within the cabin. Some helicopter models which have been used as ambulances can carry two victims, but they must be carried in such a way that continuing emergency medical care cannot be given during the flight. Carrying patients in a litter external to the cabin, as must be done in less expensive

* *Member, KMA Disaster Medical Care Committee*

but small models, can only be regarded as frightening.

The cabin itself is an unstable platform, suspended as it were from the spinning rotors, where it is often subjected to considerable vibration and the effects of gusty winds. The noise level is frequently quite high within the cabin, especially if the helicopter is powered by internal combustion piston engines. The introduction of the turbine engine has reduced the noise and vibration to some extent; and it has also allowed a more rapid response time to emergencies, as "warm-up" of the turbine engine takes but a few minutes, compared to a possible 20 or 30 minute warming of the piston engine in cold weather.

Costs of Helicopter Service

Another factor of importance in the use of helicopters for ambulance service is the cost involved. Basic purchase list price of a minimally acceptable helicopter is in the neighborhood of $130,000; and a more acceptable model, from the standpoint of cabin space, begins at $360,000. This compares to a cost of $12,000 for a fully equipped surface ambulance which meets the criteria of the National Academy of Sciences-National Research Council report.

Operating costs, including fuel, oil, routine maintenance, etc., is estimated at $65 to $70 and up per hour of flying time. If depreciation, air-frame liability insurance, routine and special maintenance costs are added, the cost of operation goes to a minimum of $110 per hour of flying time. The cost in this instance considers a high usage rate of more than 1,800 hours of annual flying time; with 600 hours of flying time per year, the overall cost is approximately $220 per hour. This does not include the salary or wages of the helicopter pilot, who may be paid about $50 per hour of flying time or $900 to $1,000 per month on a salary basis.

In addition to the costs mentioned, another factor which may prove significant is that the time required for maintenance of the complex mechanisms of a helicopter may approach the actual flying time. The Bell Helicopter Company estimates a "down time" for maintenance and overhaul of 96 hours per 100 hours of flying time. A study prepared by Northrop Nortronics, entitled *Helicopter Emergency Medical Aid System,* suggests that two helicopters are necessary to provide 24-hour-a-day service. Another operational service has set a schedule of six days of operation and readiness, followed by three days off for maintenance.

Auxiliary Services for Helicopters

If helicopters are to be used routinely with safety, hospitals would need to provide a landing area. This area should be flat, free from overhead obstructions, and reasonably close to the hospital and the emergency room. If the distance away requires an intermediate transportation vehicle, further delay and cost becomes inherent. A simple heliport in and of itself is not expensive, but land costs and space may be difficult to meet. It is not considered advisable to provide a heliport on the roof of a hospital, as a landing accident with the possible spillage of fuel and fire could only compound a nasty situation. Federal Aviation Board and local approval for a landing site is required if the site is to be used routinely.

Communications systems are advisable so the helicopter can communicate with not only local police and fire departments, but also with the hospital. A base of operations would hopefully be established either in the hospital or with other agencies, with on-call rooms required for personnel.

What Can Be Done

From the foregoing, it becomes apparent that helicopter ambulance service is a very costly proposal, such that to operate a purely ambulance helicopter service is prohibitive unless the usage rate would be quite high in a relatively small area. A centrally-based helicopter to provide a service over a wide area cannot appreciably reduce time factors—i.e., a trip to

pick up a patient 80 miles distant, with the helicopter based at a center thus having to travel 160 miles, would require as much time as an adequately equipped surface ambulance going one way from the point of origin to the center. A further limitation of the helicopter is the fuel range of 200 to 300 miles in most models.

A way to reduce the cost factors is to provide helicopters with dual or even triple duty usage. For instance, a police unit might use a helicopter for traffic surveillance and special observation, and at the same time or as necessary, be on call for transportation of medical emergencies. The U.S. Armed Services are cooperating with civilian authorities in several areas near bases on an experimental basis, using their helicopters in providing some service.

It has been suggested that reserve units of the armed forces of the National Guard might be able to supply pilots and helicopters for this service—again a dual function. At the present time, most National Guard and reserve units are operating with old, obsolete castoff helicopters of the regular forces, and would find it difficult to provide much service; but future expectations may change this situation. A commercial operator in California has a fleet of surface ambulances to cover a large area, and uses helicopters as necessary. The helicopters are otherwise in use commercially, such as bank couriers.

The various agencies, communities, and operators of helicopter ambulance service have found that the helicopter cannot replace the surface ambulance and emergency crews. These are still necessary for service in areas not accessible by helicopter and during periods when the helicopter cannot operate, or is otherwise in use.

Summary

The helicopter ambulance is a costly item, and not the answer to all the problems of emergency medical care and transportation. We should look first to providing adequate surface ambulances and equipment, well-trained ambulance crews, and improved communications, to which may then be added the capability of the helicopter. One cannot set a price on a human life which might have been saved by a helicopter ambulance, but neither can we ignore other needs of our society.

References

1. Schultz, M. J.: Help Is a Helicopter. *Today's Health*, April, 1969.

2. Howard, J. R.: Emergency Helicopters Can Cut Highway Death Rate. *American Aviation*, Jan., 1968.

3. Himmel, N. S.: Interest in Air Ambulance Use Increases *Aviation Week and Space Technology*, March 24, 1969.

4. Neither Hearse Nor Station Wagon. *JAMA* 207:672, Jan. 27, 1969.

EDITORIALS

We and the AMA

MUCH is written and discussed critical of the American Medical Association and of medical organizations generally. Participants in this criticism are often physicians, though the most caustic comments have been found in our daily press. They tend to convey the impression that the AMA is a bureaucratic, closed organization entirely insensitive to the best medical interests of our people and bent entirely on self-aggrandizement. It is our opinion that such estimates are unfounded and, in the main, unfair.

A recent editorial by Morris Fishbein, M.D., in *Medical World News* is entitled "AMA: In a Moribund State?." His discussion is forthright and provocative, but not critical. He cites that the attendance at this year's convention in Atlantic City numbered fewer than 8,000 physicians; whereas, in former years, it has been almost double that number.

That, incidentally, is true of many other medical organizations. From 1968 to 1970, the membership of the Southern Medical Association increased by more than 500, but attendance at the annual meeting declined by more than 700.

Doctor Fishbein discussed a number of plausible reasons, chief among them being the multiplicity of meetings of specialty groups and world organizations which recently have drawn many physicians' interest from this, their parent organization. His concluding paragraph: "But the AMA's chief problems—diminishing interest and lack of participation by doctors—need careful analysis and prompt solutions. Surely there must always be a prestigious national organization of American physicians. The one that grew so great, and commanded the loyalty and support of almost all physicians, has reached that stature because of its worth. . . ."

This is the thought that we would wish to emphasize. The leadership and devotion to the delivery of the best medical care to American people has perhaps never been greater nor more effective than today. In view of the broadened objectives and programs, our dues increase seems thoroughly reasonable. We are widely publicized as having a large, expensive, and active representation in Washington. We should have. What other group of Americans should have more intelligent and unselfish interest in the shaping of our National Health Program than physicians? If we are accused of self interest principally, that should not greatly concern us, since it simply is not true. No group of citizens need be more alert in the selection of our lawmakers than we. There should be no apology for our activities in this field.

No organization has been more active in providing facilities for the expansion of medical and paramedical education than the AMA. Our present shortage of physicians has been an acknowledged problem for the past 20 years and a constant concern of organized medicine. Expansion of responsibility toward improvement of the environment, control of alcohol and drug abuse, and improved medical care have been expensive undertakings. The

extension of continued medical education to practicing physicians has been a major program. These endeavors are costly, and justifiably our dues have been increased. Furthermore, with discontinuance of membership—which had admittedly been considerable—the cost falls more heavily upon those who remain.

Kentucky physicians have a very particular incentive to support the AMA and its programs. Our Hoyt Gardner, M.D., is national chairman of AMPAC, the very necessary political division; and he is to be commended and supported in his efforts, which, especially during the present period, are so important.

During its 124 years of activity, seven Kentucky physicians have been elected to the presidency: Henry Miller, M.D., 1859; David Yandell, M.D., 1872; Joseph Matthews, M.D., 1899; Lewis McMurtry, M.D., 1905; Irvin Abell, M.D., 1938; Fred Rankin, M.D., 1942; and Elmer Henderson, M.D., 1950. William Pusey, M.D., elected from Illinois in 1924, was a native of Hardin County, Kentucky. We had a near miss in 1970 when our Robert Long, M.D., narrowly failed election. Kentucky has always been a substantial factor in the AMA and should continue so. Only the populous states of New York (13), Pennsylvania (10), and Illinois (8), have provided more leadership than we.

Kentucky physicians continue loyal and liberal in their support of AMA. In *The Louisville Times* of August 5, 1971, Mr. Wayne Welch, a staff writer, reported on his interview with Mr. Robert Cox, Executive Director of KMA, and Mr. Harry Lehman, Executive Secretary of Jefferson County Medical Society. He said that at the June convention in Atlantic City this year, reports indicated that for the first time in recent years less than half the nation's physicians are dues paying members of AMA. Reasons for this decline were presented, many of them plausible enough.

Eighty-four per cent of KMA members belong to AMA. There were 2,462 active KMA members in 1970—representing about 90 per cent of physicians practicing in the state. At any rate, of all physicians in Kentucky, well over 70 per cent are members of AMA. This is pretty good, but we should do better. The percentage is reported as even higher for Indiana's physicians. This seems highly complimentary to doctors in our central area.

To claim that all the programs and objectives of the AMA are unselfish, simon-pure, and to our particular individual liking would be foolish. Of course, they are not. The same is true, however, with respect to the political party, the church, the fraternal organization, and the club to which we constantly give moral and financial support. We only expect that the main thrust be progressive, unselfish, and for the betterment of our fellowmen. Moreover, as members of an organization, we need to be active and use our influence to guide and improve its programs in the most productive paths. Let us do so for the American Medical Association.

SAM A. OVERSTREET, M.D.

ORGANIZATION SECTION

Eighty-one KMA Members Attend Peer Review Workshops

Eighty-one KMA members of the 15 KMA Trustee District Peer Review Committees attended workshops at the Ramada Inn, Louisville, on August 19 and 26 and September 2 and 9, 1971.

The workshops, sponsored by the KMA Claims and Utilization Review Committee, were among the first steps taken with funds provided in a special grant. The grant, issued by the Comprehensive Health Planning Council, specified the objectives and desired implementation of a statewide peer review program. This, and the development of peer review planning information, are portions of the objectives of the grant.

At the seminars, the members were addressed by representatives of Medicare, the Kentucky Medical Assistance Program, Blue Cross and Blue Shield, and the Health Insurance Council. Each of these representatives spoke on peer review as it affected their respective organization.

In workshop sessions, the members reviewed sample cases taken from the historical files of the KMA Claims and Utilization Review Committee and the Jefferson County Medical Society. These cases were chosen to give a representative sampling of all cases likely to be heard by a review committee.



Marvin A. Bowers, Jr., M.D., Louisville, Chairman of the KMA Claims and Utilization Review Committee, looks on during workshop discussion moderated by Harvey R. St. Clair, M.D., Louisville, at one of the Trustee District Peer Review Workshops.

Of the 99 members of the newly appointed Trustee District Peer Review Committees, 81 (or 81 per cent) were able to attend one of the workshops. Marvin A. Bowers, Jr., M.D., Louisville, Chairman of the KMA Claims and Utilization Review Committee, moderated each of the workshops. Doctor Bowers was pleased with the attendance and stated that most of the physicians attending the meetings felt them to be quite beneficial as an educative vehicle.

PANMED Television Programs Scheduled For Fall Showing

A series of four continuing medical education programs are being presented in weekly broadcasts this fall over the Kentucky Educational Network, according to R. K. Brown, M.D., Georgetown, KMA-ETV Committee Chairman.

The PANMED series, which is to be broadcast October 13, 20, and 27 and November 3 at 11:00 p.m. EST (10:00 p.m. CST), is sponsored by the Kentucky Medical Association, the Kentucky Chapter of the American Cancer Society, the University of Kentucky Medical Center and the University of Louisville School of Medicine.

The first program, "Thyroid Cancer," is to be shown on Wednesday, October 13. Other future shows are to include "Management Decisions in Stroke": Part I, October 20; Part II, October 27; and Part III, November 3.

Check your local newspaper for the channel number of the KETV station nearest you.

Family Practice Exam Announced

The American Board of Family Practice announces that it will give its next examination for certification in various centers throughout the United States. The examination will be over a two-day period on April 29-30, 1972.

Information regarding the examination can be obtained by writing: Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Kentucky 40506. Deadline for receiving completed applications in the Board office is February 1, 1972.

Ephraim McDowell Anniversary To Be Observed In Danville

During the afternoon of November 11, there will be a gathering at the Kentucky Medical Association's McDowell House in Danville to observe the 200th anniversary of the birth of Ephraim McDowell, M.D. (1771-1830).

Born the ninth of eleven children to Mary McClung and Samuel McDowell, of pioneer Scotch-Irish families in Rockbridge County, Virginia, he grew to maturity in Kentucky. He was apprenticed in medicine in Staunton, Virginia, and attended formal medical lectures in Edinburgh, Scotland.

In Danville, Kentucky, in December, 1809, Doctor McDowell first demonstrated the practicability of peritoneal section for ovariotomy. He did not publish his account of the operation until 1817, by which time he could report on three consecutive cases of "Extirpation of Diseased Ovaria." All three of his patients survived and were returned to their families performing their customary duties.

Doctor McDowell has been honored on numerous occasions, including a commemorative stamp issued December 30, 1959, to observe the sesquicentennial of the momentous operation on Jane Todd Crawford.

Few men ever have the combination of talent and circumstance that make such an outstanding contribution to medical progress possible. This modest frontier surgeon met the challenge and accomplished what no one before him had successfully achieved. In his quiet, unassuming manner, we are certain Doctor McDowell would appreciate our simple observation of this bicentennial of his birth.

Eugene H. Conner, M.D., Member
McDowell House Board of Managers

Ky. Thoracic Society Conference Is Set For November 5-6

Honorable Carl D. Perkins, Member of Congress from the 7th District of Kentucky, will be the dinner speaker at the fall conference of the Kentucky Thoracic Society set for November 5-6 at the Ramada-Imperial Inn, Lexington. He will speak on "Environmental Health" at 6:30 p.m. on November 5.

The two-day conference will consist of talks and panel discussions by prominent physicians, exhibits, and the dinner.

The November 5 meeting, moderated by Walter G. Rosenbalm, A.R.I.T., will be primarily for paramedical personnel. Ballard Wright, M.D., will address the group on "Comparison of Respirators"; Judah L. Skolnick, M.D., will speak on "Physical Diagnoses for Nurses and Therapists"; and Carolyn Ann Voelker, B.S.N., on "Nursing Responsibility for Respiratory Disease Care."

William P. McElwain, M.D., will moderate a debate, November 6, on "Evaluation of Short Term Hospitalization of TB Therapy." The program for that day will be primarily for physicians. Other topics to be discussed Saturday are: "Martin County Project," "INH Prophylaxis — Question of Toxicity," "Pulmonary Disease Disability Evaluation for Social Security," and "Drug Management of Tuberculosis." Featured that afternoon will be a "Stump the Experts" session.

All physicians are invited to attend both days of the session. Further information is available from: Kentucky TB and Respiratory Disease Association, 4100 Churchman Avenue, Louisville, Kentucky 40215.

CORRECTION

John S. Harter, M.D., is a graduate of the Washington University School of Medicine, St. Louis, Mo. In a story appearing in the August *Journal,* it was stated that he is a graduate of the University of Washington School of Medicine.

KAFP Meeting Is Planned For November 6-7

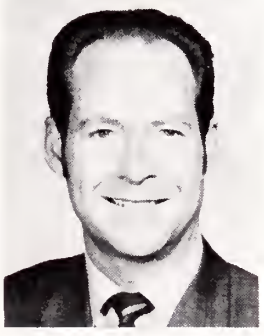
The American Academy of Family Physicians, Kentucky Chapter, will hold its quarterly meeting November 6-7, at Jenny Wiley State Park, Prestonsburg, according to Raymond Wells, M.D., Inez.

The program on November 6 will pertain to adult and pediatric endocrinology. The November 7 meeting will be centered on discussion of Health Maintenance Organizations.

This program is acceptable for 10 accredited hours by the American Academy of Family Physicians. All physicians, including non-members of the Academy, are welcome to attend.

Ky. Pharmacists Elect Ralston; Install Rolfsen As President

D. Howard Ralston, R.Ph., Paducah, was installed August 18 as President-Elect of the Kentucky Pharmaceutical Association, at the 94th Annual Convention of the group. Richard H. Rolfsen, R.Ph., Covington, was installed as President.



Mr. Ralston

A 1959 graduate of the U. of K. College of Pharmacy, Mr. Ralston is a member of the McCracken County Drug Abuse Committee, the Paducah Association of Retail Druggists, and the American and Kentucky Pharmaceutical Associations.

Other officers installed at the Convention are: James P. Arnold, Jr., Franklin, 2nd Vice-President; Patricia A. Donahue, Lexington, 3rd Vice-President; Harold G. Becker, Louisville, Secretary; and Alvin Bertram, Lexington, Treasurer. New Directors are R. N. Smith, Burkesville, and Noah E. Becknell, Lexington. Donald J. Smith, Louisville, was appointed to fill the unexpired term on the Board of Directors left vacant by Mr. Ralston.

In Memoriam

THOMAS J. CRICE, M.D.
Louisville
1882-1971

Thomas J. Crice, M.D., a Louisville psychiatrist, died in Lexington July 7, 1971. Doctor Crice was a native of Blandville, but practiced medicine in Louisville until he retired in 1964. He was a 1907 graduate of the University of Tennessee School of Medicine. He was a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

RANDOLPH DADE, M.D.
Hopkinsville
1886-1971

Randolph Dade, M.D., a Hopkinsville physician, died July 7, 1971. A retired family practitioner at the time of his death, Doctor Dade was a graduate of the Vanderbilt University School of Medicine. He was a member of the Pennyrile Medical Society and the Kentucky and American Medical Associations.

SIDNEY ROSTON, M.D.
Louisville
1921-1971

Sidney Roston, M.D., a Louisville physician and former associate professor at the University of Louisville School of Medicine, died August 28. A native of New Haven, Conn., Doctor Roston received his M.D. Degree from the Yale University School of Medicine in 1951. He specialized in internal medicine. He was a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

DAVID H. THURMAN, SR., M.D.
Louisville
1912-1971

David H. Thurman, Sr., M.D., a specialist in internal medicine, died in Louisville August 1. Doctor Thurman graduated from the University of Louisville School of Medicine in 1938, served in the U. S. Air Force during World War II and then returned to Louisville to set up practice. He was a member of the Louisville Society of Internists, the Jefferson County Medical Society, and the Kentucky and American Medical Associations.

"Laetrile" Findings Negative

The Food and Drug Administration recently announced findings of an Ad Hoc Committee of Consultants for Review and Evaluation of Laetrile (Amygdalin). In a report to the Commissioner of Food and Drugs, the committee found "no acceptable evidence of therapeutic effect to justify clinical trials" of the drug. The consultant committee was composed of five non-FDA cancer specialists.



Executive Director Robert G. Cox (right) discusses progress on the KMA Building addition with one of the construction foremen. Construction is on schedule, with the completion date anticipated to be mid-March, 1972.

Lecture To Be Given

The Twelfth Annual John Walker Moore Lecture will be given at 1:00 p.m., October 27, in the Library of the Health Sciences Center by Carl V. Moore, M. D., St. Louis, Mo. Sponsored by the Louisville Society of Internists and the Department of Medicine, University of Louisville School of Medicine, the lecture is to be part of a two-day meeting of the groups.

The lecture will be followed by three case presentations.

All interested physicians are invited to attend.

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NEWS ITEMS

Mac F. Cahal, Executive Director and General Counsel of the American Academy of Family Physicians, recently announced that he will retire as chief administrative officer of the Academy. He will continue as Legal Counsel. Mr. Cahal established the national office of the Academy in Kansas City, Missouri, in 1948.

Lawrence G. Goldberg, M.D., is now practicing thoracic surgery in Louisville. He graduated from the University of Louisville School of Medicine in 1962, interned at Louisville General Hospital, and served general surgery, thoracic, and cardiovascular residencies at Louisville General Hospital.

Robert L. Jetton, M.D., a specialist in dermatology, has joined M. T. Fliegelman, M.D., and L. G. Owen, M.D., in practice in Louisville. He has also joined the faculty of the Division of Dermatology, University of Louisville School of Medicine. Doctor Jetton graduated from the Vanderbilt University School of Medicine in 1965, interned at the Vanderbilt University Affiliated Hospitals, and served his residency at the Baylor College of Medicine.

Albert C. Selke, Jr., M.D., has joined the faculty of the University of Kentucky College of Medicine. An associate professor at U. of K., Doctor Selke is a specialist in diagnostic radiology. He graduated from the University of Pennsylvania School of Medicine in 1959, interned at Childrens Hospital, Los Angeles, and served residencies in pediatrics and radiology at Childrens Hospital, Los Angeles, and the University of Iowa. He was formerly on the faculty of the University of Southern California and the University of Iowa.

Bernie J. Weiss, M.D., a specialist in general surgery, has joined Milton Comer, M.D., in practice in Louisville. Doctor Weiss is a 1965 graduate of the University of Tennessee College of Medicine. He interned at Bellevue Hospital and served his residency at Columbia-Presbyterian Hospital, both in New York.

The AMA 1971 Medical Journalism Award competition is now open. Initiated in 1964 to encourage medical reporting contributing to an improved understanding of health questions, it is open to people writing for newspapers, magazines, radio, and television. For further information, write: Medical Journalism Awards Committee, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

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THE FACE OF GENETIC DISORDERS: by Richard M. Goodman, M.D., and Robert J. Gorlin, D.D.S., M.S.; published by The C. V. Mosby Company, St. Louis, 1970; 169 pages.

One of the strongest features in this book is its first part entitled "An Introduction to Genetic Inheritance in Counseling." These 17 pages contain excellent information for any physician who has children in his practice. The explanation of genetic counseling, though it contains the authors personal viewpoint, is very good and should be read by every physician.

The catalogue of conditions is limited and requires a diagnosis of the child seen in order to be able to find and match the pitcure with the child. The very brief and sketchy information that is given about each condition is unfortunately much too brief to be of benefit to the average physician. Doctor Gorlin's other book, *Syndromes of the Head and Neck*, is much more complete and contains a much more useful catalogue of pictures and discussions. The photography in this book is excellent. It would be much more useful to have the pictures in color; however, this is not a necessity.

For physicians who are going to be seeing a lot of children on referral, this is an excellent book. For the average physician who will rarely see any of these disorders, I think it would be an unnecessary expense. It is, in short, an interesting and useful catalogue of a limited number of genetic conditions.

VERNON L. JAMES, M.D.

A TEXTBOOK FOR MEDICAL ASSISTANTS: by M. Murray Lawton, M.D., and Mr. Donald F. Foy; published by The C. V. Mosby Company, St. Louis; 2nd Edition, 1971; 473 pages; price $9.85.

Doctor Lawton and Mr. Foy have divided the second edition of this textbook into two parts. The first part deals with the business practices and the second, with clinical practices in the physician's office.

As the authors indicate in the book, no one girl could be expected to know all the techniques and procedures of the office; but with some education and experience, she could be made more knowledgeable by having a good reference book.

Many interesting subjects are covered, including one chapter dealing particularly with the Development of Medical Science. Each chapter includes a glossary to help the lay person better understand the contents of the chapter.

The authors are trying to give information to the lay person, and the professional as well, that will help solve most situations that might occur in any physician's office, large and small, urban or rural.

With all the changes encountered daily in the office, the physician himself could use a good reference to keep abreast of what is being done in other offices with the same situation.

It is my opinion that this book is an excellent reference. With previous exposure to medical assisting, a girl would benefit by reading this textbook and referring to it when necessary. It covers many areas often overlooked, such as attitude, appearance, how to obtain employment, and even devotes a little space to techniques on how to handle situations concerning the physician's wife.

MRS. DEE ROWE

THE IMMUNOLOGY OF MALIGNANT DISEASE: By Jules E. Harris, M.D., and Joseph G. Sinkovics, M.D.; published by The C. V. Mosby Company, St. Louis, 1970; 251 pages; price $15.00.

Today most practicing physicians treat cancer in one or more of its stages, but cancer's erratic, unpredictable course continually puzzles all of us. The modern immunology of cancer, largely developed in the last ten years, is now yielding a new understanding of the cancerous process. An up-to-date knowledge of the alterations of normal immunologic processes and immunologic defects resulting from the growth of the cancer or from its treatment suddenly become essential to the practitioner. *The Immunology of Malignant Disease* covers this territory; no other book, to my knowledge, has tried to do it.

The book is somewhat heavy going, however; one cannot just read it. But it is not very large or long and careful study proves quite rewarding, as there are many pearls. The book's main defect consists in reviewing too great a bulk of experimental work. Each experimental paper is summarized by one sentence; and then these sentences are strung together, often without critical comment on the work. A glossary of terms might help.

The first chapter covers modern concepts of normal immune mechanisms, which we can all study and review with profit. This chapter may be worth the price of the book. Chapter Three summarizes the specific immune defects in the various leukemias and lymphomas; several charts and tables summarize the material quite well. The fifth and last chapter, "Tumors of Man," covers the contributions of immunology to theories of carcinogenesis, as well as immune reactions in cancer patients with and without treatment. The last 11 pages contain a description of the present trials with various forms of immunotherapy in human cancer patients.

CONDICT MOORE, M.D.



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

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A Relief Factor in Peptic Ulcer

Worry, frustration, job pressure—all set up excessive vagal currents in patients with peptic ulcer.

Pro-Banthine "insulates" the stomach, the duodenum and the lower intestinal tract—the sites where these destructive currents take their toll.

This "insulation" helps block excessive enteric activity and acidity, thus helping to provide the proper environment for the healing of peptic ulcers.

It's nice to know that Pro-Banthine provides this protection at a dosage that causes little or no discomfort and that, unlike ataractic agents, Pro-Banthine does not cloud the patient's awareness or thought processes.

By moderating excessive vagal currents Pro-Banthine relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthine also prolongs the activity of antacids.

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.
Contraindications: Glaucoma, severe cardiac disease.
Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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Special Petrolatum Base
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In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
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NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

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Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

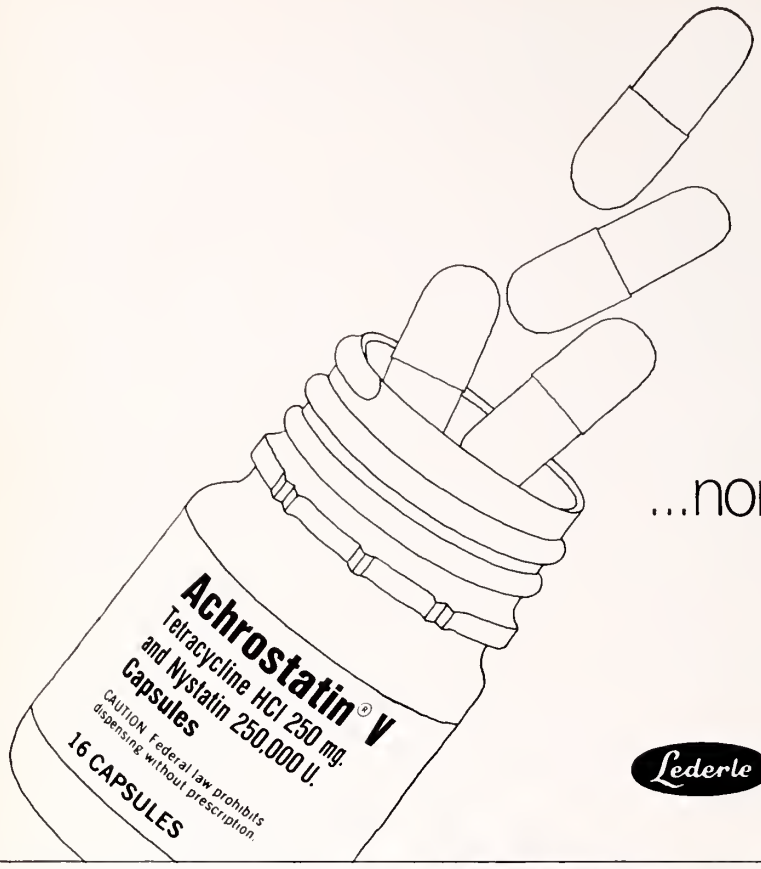
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Noludar®300

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CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

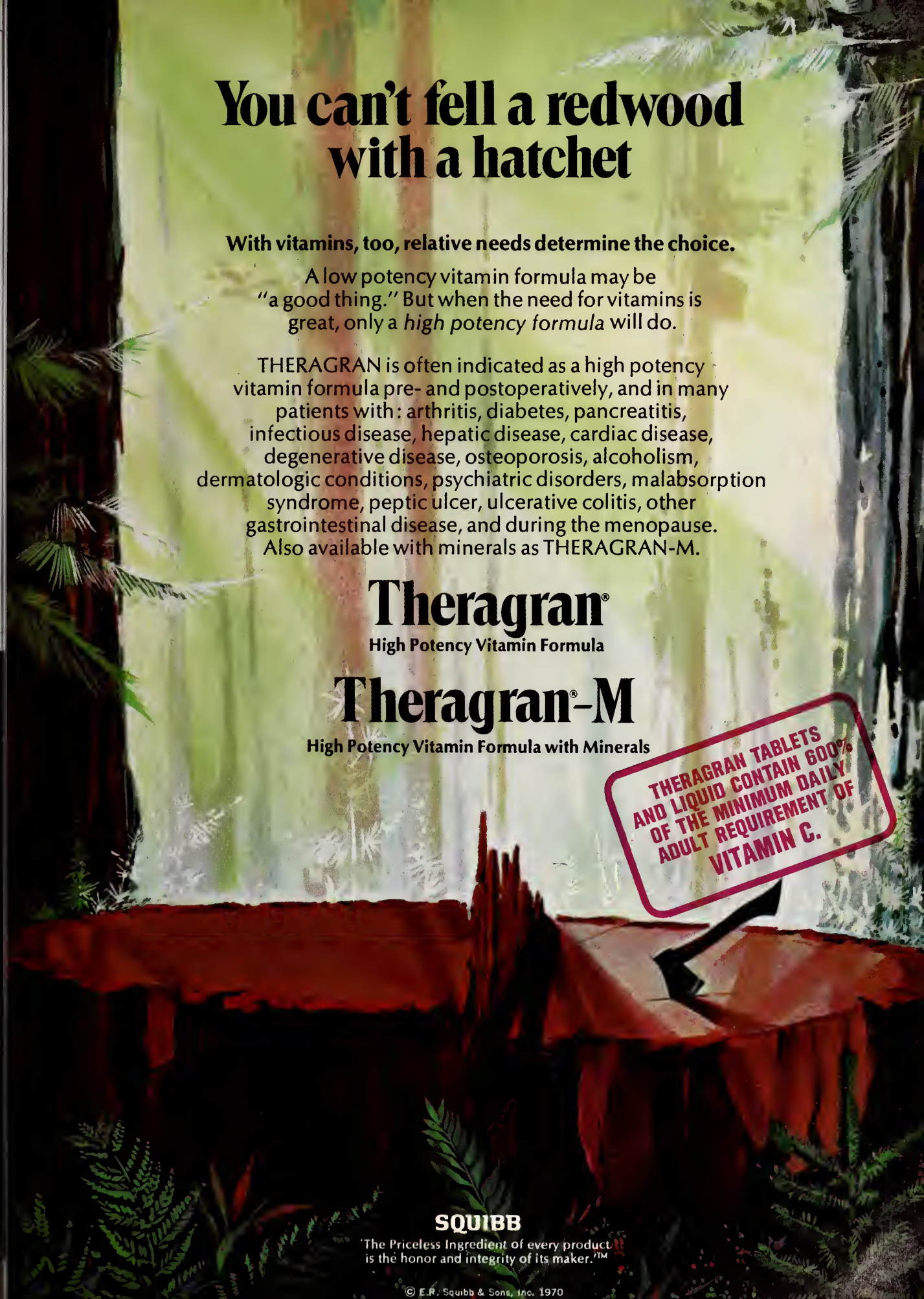
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

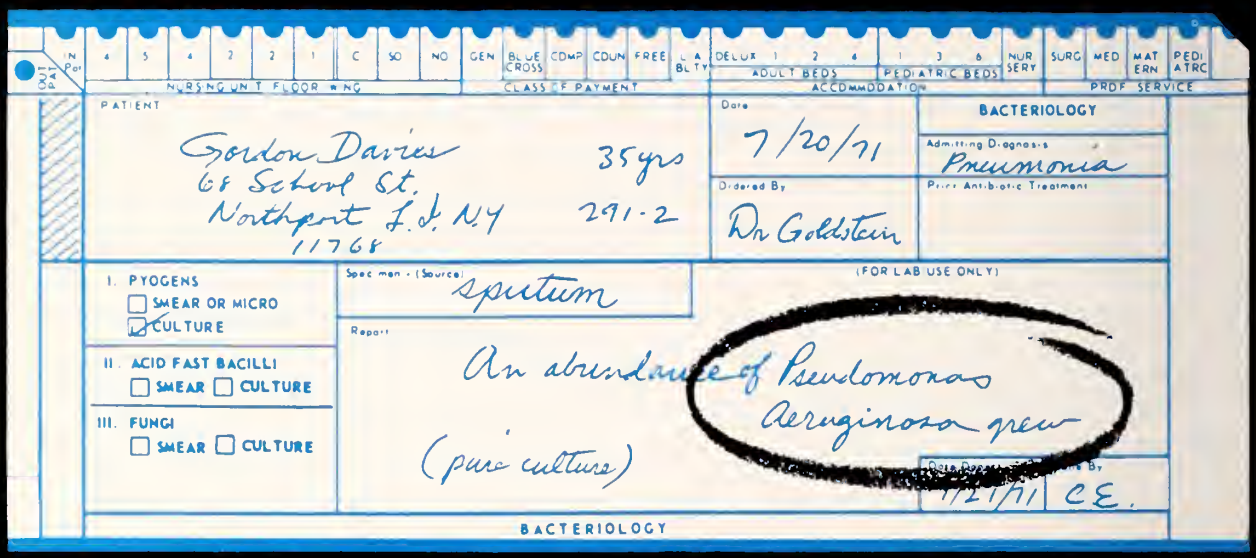
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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Report

An abundance of Pseudomonas Aeruginosa grew
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(sterile disodium carbenicillin)

A serious infection... Pseudomonas, confirmed by pure culture. Fortunately, the strain proves sensitive to carbenicillin and the patient is not allergic to penicillins. The choice is clear: Pyopen.

Unlike other antibiotics currently available for the treatment of Gram-negative sepsis, there are no reports of nephrotoxicity or ototoxicity with Pyopen therapy. Its effectiveness against *Ps. aeruginosa* and *Proteus* species (particulary indole-positive strains) has been amply confirmed by clinical experience and microbiologic studies.

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THE TOTAL SERVICE CONCEPT:
Beecham-Massengill's dedication to the concept of total service is exemplified by the Pyopen Program — offering valuable teaching-learning materials and an added measure of personal attention: *Gram-Negative Sepsis,* a multimedia presentation by leading American medical authorities... *A Profile of Pseudomonas,* a monograph for the clinical microbiologist... *24-hour consultation service* in matters relating to carbenicillin (phone: 201-778-9000)... *emergency supply,* a novel plan for assuring the continual availability of Pyopen to hospitals specifying this brand of carbenicillin.

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PRESCRIBING INFORMATION **Indications:** Primarily for treatment of infections due to susceptible strains of *Pseudomonas aeruginosa, Proteus* species (particularly indole-positive strains), and certain *Escherichia coli.* Clinical effectiveness has been demonstrated in the following infections when due to these organisms: Urinary tract infections; severe systemic infections and septicemia; acute and chronic respiratory infections (while clinical improvement has been shown, bacteriologic cures cannot be expected in patients with chronic respiratory disease and cystic fibrosis); soft tissue infections. Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps. aeruginosa, Proteus mirabilis, Pr. morganii, Pr. rettgeri, Pr. vulgaris, E. coli, Enterobacter* species, *Salmonella* species, *Hemophilus influenzae,* and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus aureus* (nonpenicillinase-producing), *Staph. albus, Diplococcus pneumoniae,* Beta-hemolytic streptococci, and *Streptococcus faecalis.* Some newly emerging pathogenic strains of *Herellea, Mima, Citrobacter,* and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage in Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. Vein Irritation and Thrombophlebitis—particularly when undiluted solution is injected directly into the vein. **How Supplied:** Available in 1 Gm. and 5 Gm. vials.
Before prescribing or administering, see package circular or PDR.



Additional information available to the profession on request.

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THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

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Manufacturers of Ethical Pharmaceuticals

The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

Clinical supply available to physicians.

WILLIAM P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals



The concert was just underway,
When to the conductor's dismay
Cramps and diarrhea,
Did so quickly appear,
The maestro no longer could stay.

Because diarrhea with cramping, nausea, and painful straining can strike at the most inopportune time, it takes a comprehensive agent to treat the total diarrheal syndrome and help get the patient back on the job. That's why so many physicians rely on Donnagel, especially during the fall and winter months when "flu" and viral gastroenteritis usually hit their peak.

Donnagel is much more than just a simple kaolin-pectin combination. It also contains the belladonna alkaloids to calm GI hypermotility and help relieve the distressing discomforts which so often accompany diarrhea. Certainly it's less expensive and more convenient than taking two medications. And the dosage is lower too. Available in the handy 4-oz. plastic bottle at pharmacies everywhere on your prescription or recommendation.



When diarrhea and its discomforts separate a man from his job . . .

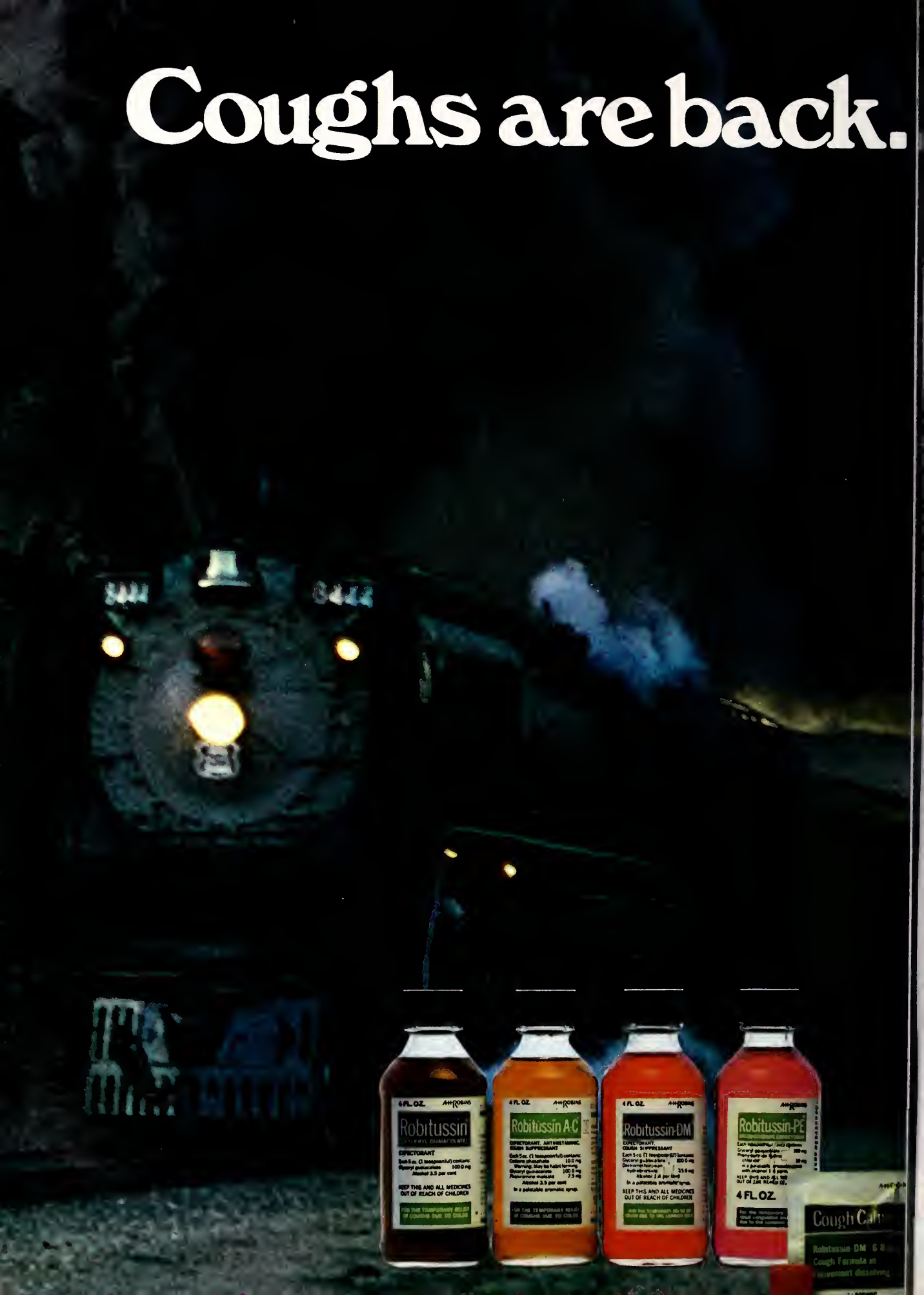
Donnagel®

Each fluid ounce contains: Kaolin, 6 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.; Atropine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Sodium benzoate (preservative), 60 mg.; Alcohol, 3.8%.

A-H-ROBINS

A. H. Robins Company,
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Richmond, Va. 23220

Coughs are back.



clear the tract with the

Robitussin® Line

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

Robitussin®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.

Alcohol, 3.5%

For unproductive allergic coughs

Robitussin A-C®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.

(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hr. cough control

Robitussin-DM®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Dextromethorphan hydrobromide	15.0 mg.

Alcohol, 1.4%

Clears sinuses and nasal stuffiness as it relieves cough

Robitussin-PE®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Phenylephrine hydrochloride	10.0 mg.

Alcohol, 1.4%

Robitussin-DM in solid form for "coughs on the go"

Cough Calmers®

Each Cough Calmer contains:

Glyceryl guaiacolate	50.0 mg.
Dextromethorphan hydrobromide	7.5 mg.

Select the Robitussin® "Clear-Tract" Formulation That Treats Your Patient's Individual Coughing Needs:

Robitussin® extra benefit chart

All 5 Robitussins have an EXPECTORANT-DEMULCENT action. Keep this handy chart as a guide in selecting the formula that provides the *extra* benefits you want for your patient.

	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®					●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS™	AHR		AHR		AHR

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

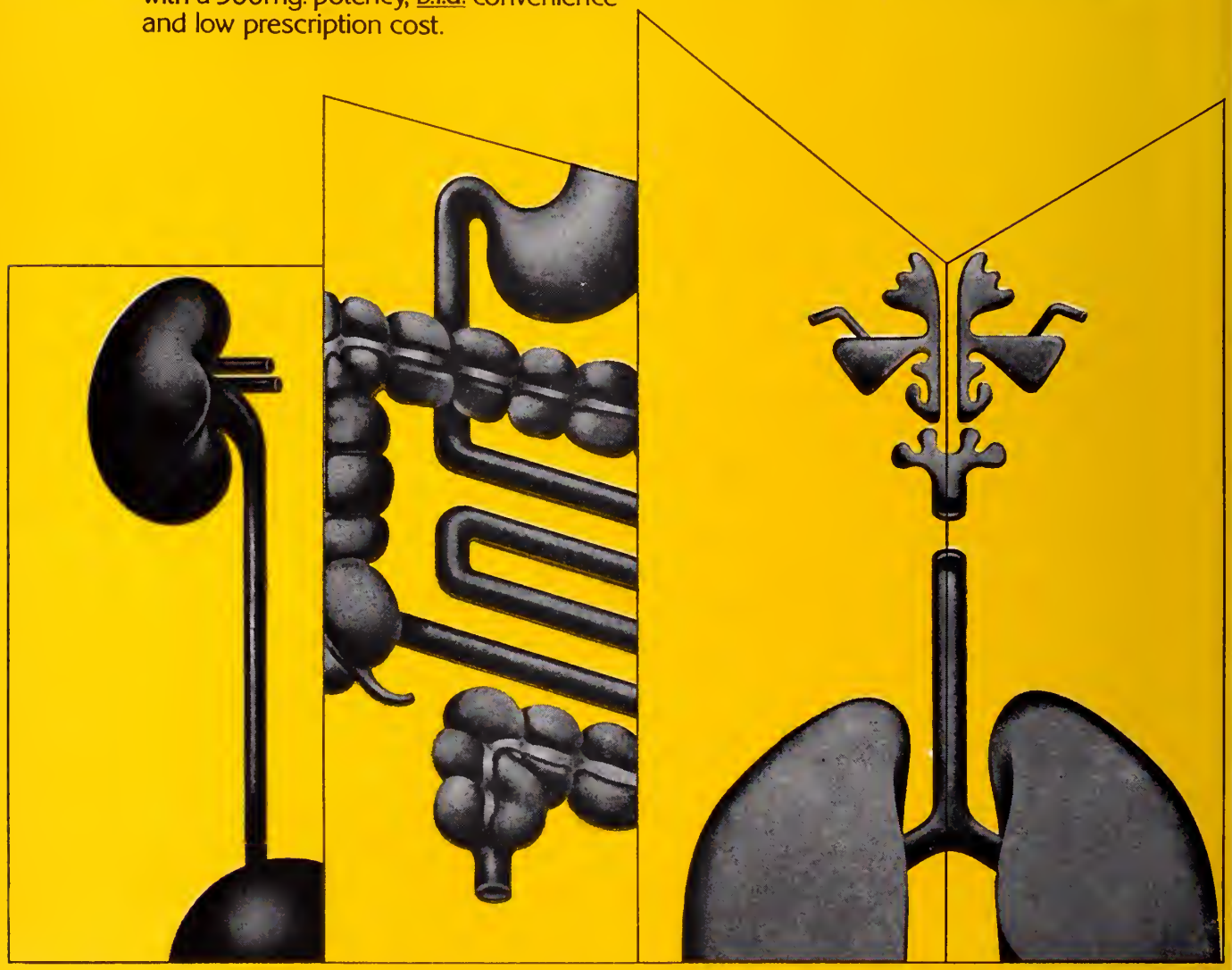
Tract Record.

Tetrex® bidCAPS® (500mg. tetracycline phosphate complex)

A record of clinical efficacy in treating bacterial infections of the respiratory, genitourinary and gastrointestinal tracts caused by susceptible strains of pneumococci, H. influenzae, staphylococci, streptococci, Klebsiellae, E. coli, Enterobacter, Shigella.

A record of years of dependable broad-spectrum activity.

A record of high urine and serum antibiotic levels all with a 500mg. potency, b.i.d. convenience and low prescription cost.



For complete information consult Official Package Circular.
(4) 2/5/71

Indications: Infections due to Rickettsiae, Mycoplasma pneumoniae (PPLO, Eaton agent), agents of psittacosis, Lymphogranuloma venereum, the spirochetal agent of relapsing fever.

Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usual Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

A.H.F.S. Category 8:12

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Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

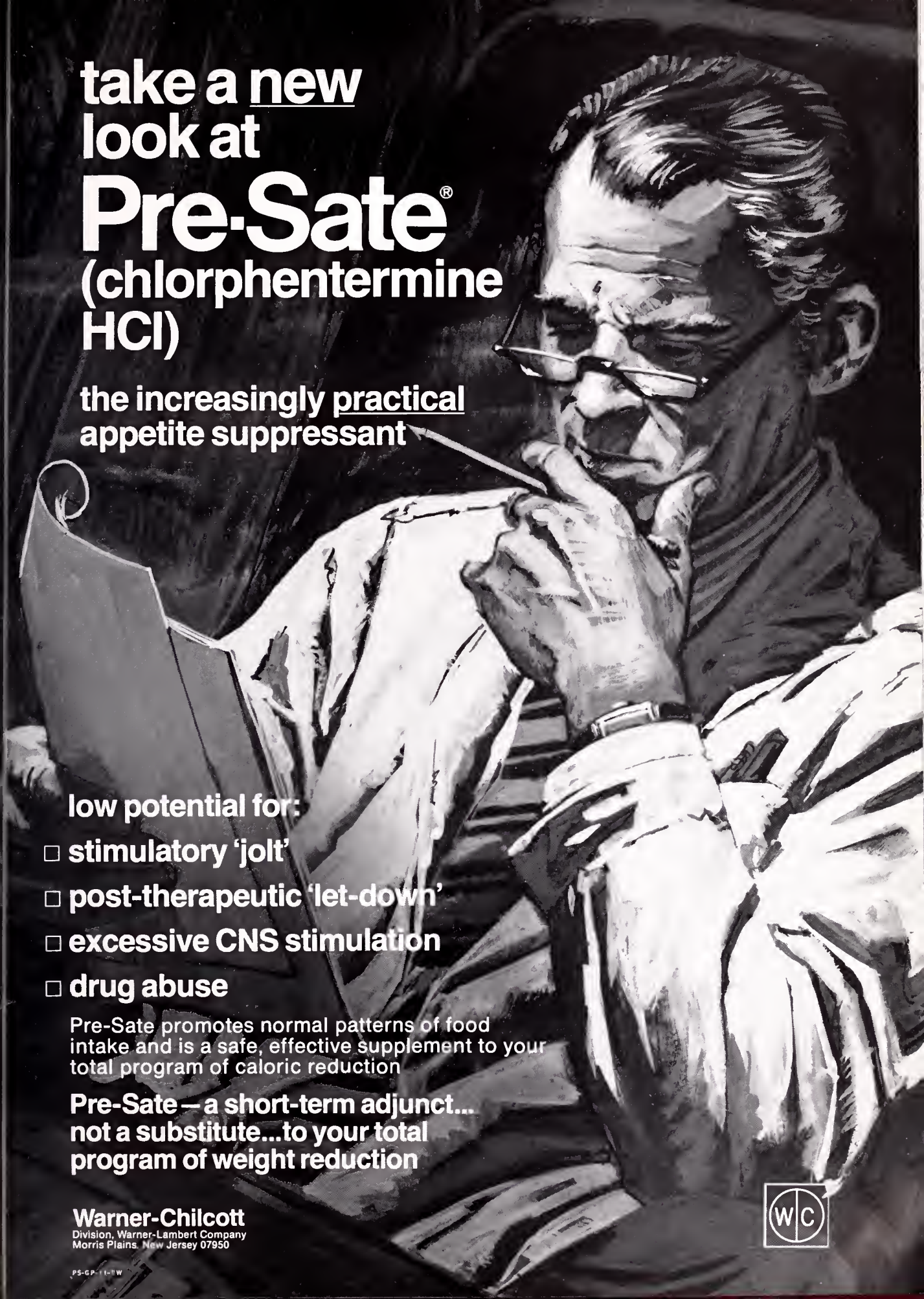
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

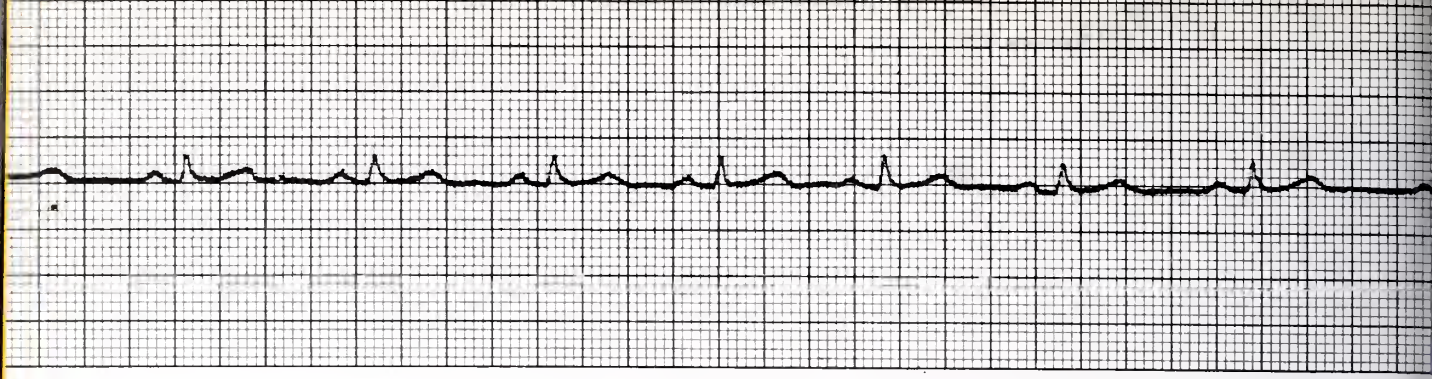
Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


take a new look at
Pre-Sate®
(chlorphentermine HCl)
the increasingly practical appetite suppressant
low potential for:
□ stimulatory 'jolt'
□ post-therapeutic 'let-down'
□ excessive CNS stimulation
□ drug abuse
Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction
Pre-Sate – a short-term adjunct... not a substitute...to your total program of weight reduction
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When disease is ruled out and psychic tension is implicated

Valium® (diazepam) 2-mg, 5-mg, 10-mg tablets

helps relax the patient and relieve his somatic symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

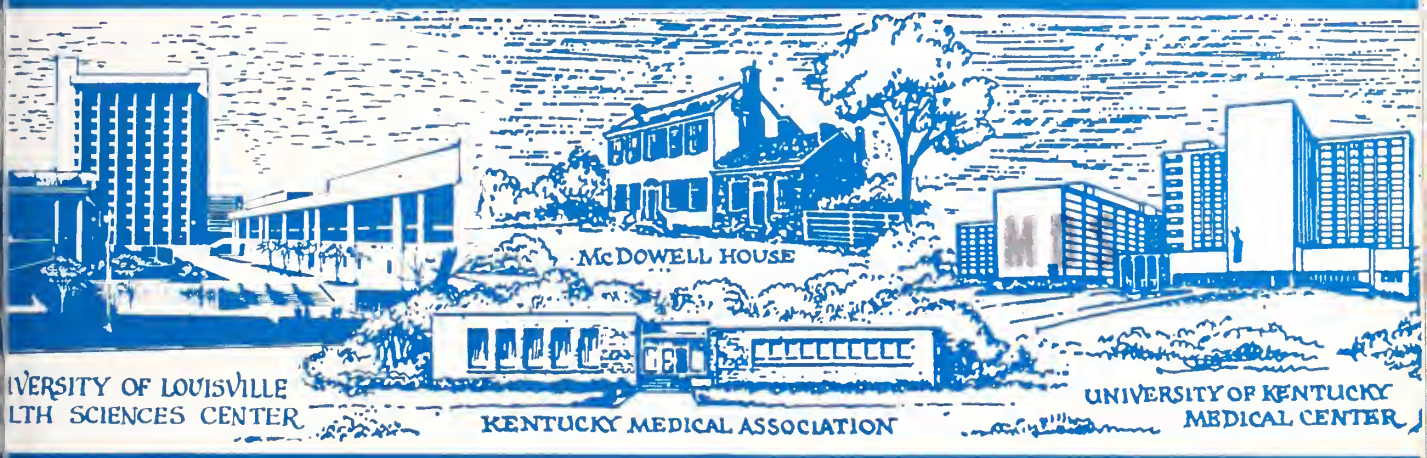
Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose™ packages of 1000.

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VOLUME 69 NOVEMBER 1971 NUMBER 11

The Journal of The KENTUCKY Medical Association



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Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

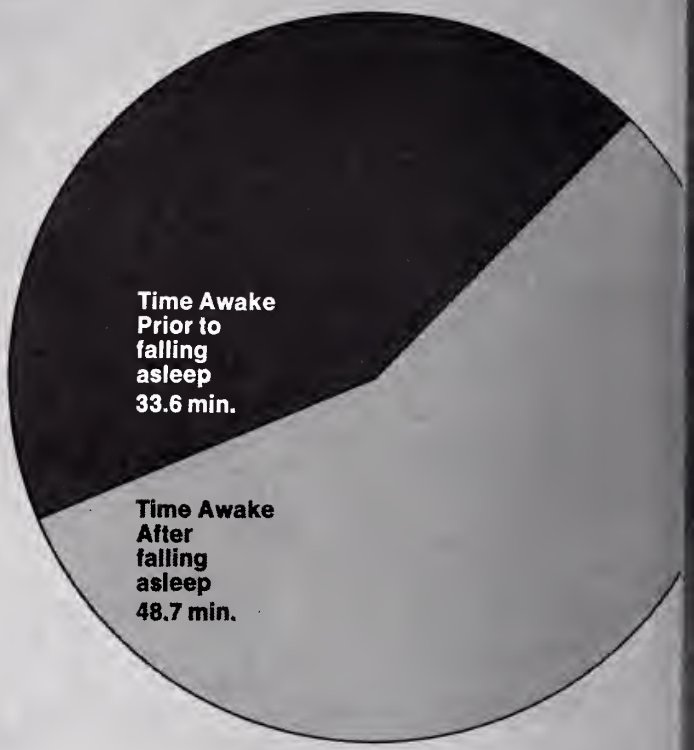
These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electro-encephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

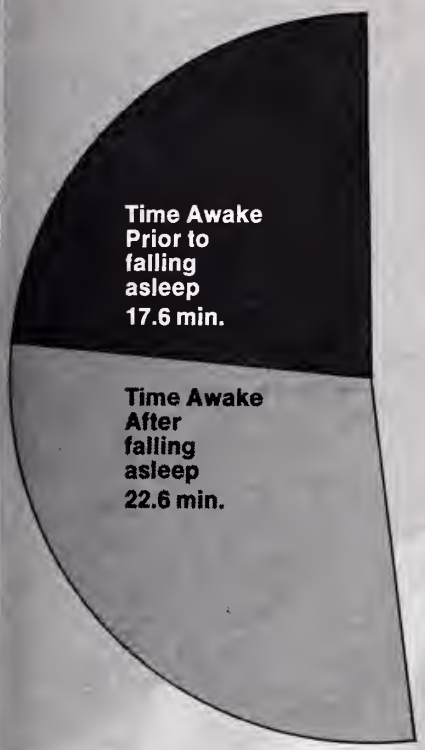
Before Dalmane (flurazepam HCl)



Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

ınd slept through the night

On
Dalmane
(flurazepam HCl)



age sleep laboratory measurements in cited studies

meter	Before Dalmane	On Dalmane
e required to fall asleep	33.6 min.	17.6 min.
e time after onset of sleep	48.7 min.	22.6 min.
ber of wakeful periods after set of sleep	12.2	8.4
l sleep time	420.0 min.	447.5 min.
f sleep percent	88.6	94.5

inical effectiveness as oven in the sleep laboratory

Dalmane®
(flurazepam HCl)

e 30-mg capsule h.s.—usual adult dosage.
e 15-mg capsule h.s.—initial dosage for erly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

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MESSAGE FROM THE PRESIDENT



Kentucky Foundation for Medical Care, Inc.

(K.F.M.C.)

UPON the formation of the Kentucky Foundation for Medical Care, Inc., the Board of Trustees of KMA will become members of that Foundation.

Report No. 24, from the Committee on Medical Economics to the 1971 KMA House of Delegates, recommended the Foundation should be studied in detail.

You will find in that report an outline of many activities that cannot properly be carried on by a medical association.

It is anticipated that the Foundation can be financed from government grants and/or donations from interested private industry. Hopefully, these circumstances being present, no KMA dues will need to be used in the work of the Foundation.

The first activity of the Foundation will be to develop a peer review mechanism which hopefully will be a model for the entire country. It is assumed that a method for financing such a mechanism will also be planned at that time.

I recently heard that the Illinois Foundation has just signed a contract with the State of Illinois for 5 million dollars to review the medical care of the charity cases, including those under Title XIX. The State expects to save 20 million dollars by this peer review.

You had better study Report No. 24, and I hope you join with me in supporting it!

John S Harter

MEDICAL SCHOOLS

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Department Of Comprehensive Medicine
University Of Louisville School Of Medicine

The principal undergraduate teaching objective of the Department of Comprehensive Medicine is to help students prepare for effective participation in the solution of health problems of communities. Whether the student is to become a teacher, a medical administrator, a specialist in some branch of clinical practice, a family physician, or a full-time research practitioner, he will have need for attitudes, knowledge, and skills essential to such participation.

More specific objectives of the Department are to offer the student opportunities to develop:

1. An understanding of the natural history of disease, including particularly its cause or causes, its occurrence, control measures against it and its results and effects.
2. A conviction of essentiality of comprehensive health care.
3. Skills in the study of health and of disease in communities or groups. Of particular importance are epidemiology, biostatistics, and research methodology.
4. Knowledge of the various community health resources available, an understanding of why and how these resources were developed, as well as general knowledge of their operation.

Electives or tutorials are arranged, on request, for students wanting special preparation in epidemiology, preventive medicine, social medicine, health care administration, comprehensive medicine, occupational medicine, etc. These are usually considered preparatory training for admission into more intensive formal academic training in one of the specialized fields at a university school of public health.

Recently it has become important to undertake, in both undergraduate and postgraduate education, programs in the broad field of alternative methods of health care delivery. An understanding of the forces calling for change and the basic content of the proposals, an ability to understand and analyze dispassionately the major proposals, and, particularly, an appreciation of sound research design and scientific evaluation in this whole field, are powers the Department would like to develop more fully in student and practitioner alike. Through the development and use of these powers, physicians can make the greatest contribution to the solution of medical-social-economic situations.

The School of Medicine and this Department co-sponsored recently, with 12 other Louisville area organizations, a high-level Conference on the Delivery of Health Care. Video tapes and the report of the formal presentations on medical foundations, prepaid group practice, employers' viewpoint and consumers' viewpoint, should be invaluable tools in the discussions of these matters in both undergraduate and postgraduate circles. Information about availability of the report and tapes can be secured by writing or calling: the Department of Comprehensive Medicine, Health Sciences Center, Louisville, Kentucky 40201. Telephone: 582-2211, Ext. 256.

From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

CASE 3-70. This 22 old gravida 1 was admitted for the second time by the Cardiology Service because of deterioration of cardiac status.

She was hospitalized in January, 1969, with congestive heart failure which responded to bed rest, low salt diet, digitalis, and diuretics. Catheterization during that admission showed a left ventricular end diastolic pressure of 21 mm. Hg., and a diagnosis of primary myocardial disease was made. Her mother was noted to have this same problem, but to a lesser degree.

She did well on the above treatment until two months prior to admission when she noted progressive weakness, nausea and vomiting, easy fatigability, dyspnea on exertion and orthopnea, but no edema. Her LMP was 12/11/69, and the patient's decompensation began at about six weeks gestation.

Initial exam revealed a pulse of 128, BP 100/70, T 97. The neck veins were distended and the liver was soft and tender and palpable four fingers below the right costal margin. The lungs were clear except for a few rhonchi at the bases. There was a quadruple gallop with a grade four over six systolic murmur radiating to the axilla. The uterus was 14 week size.

Hemoglobin was 9.4, Hct. 29%, WBC 5,800 with a normal differential. The BUN was 8 mg.%, FBS was 80 mg.%, the Electrolytes were normal, and the Pap Smear was negative. Chest film showed marked cardiac enlargement interpreted as four chamber dilatation, but without effusion. EKG was read as sinus tachycardia with left ventricular hypertrophy, left atrial enlargement, and digitalis effect.

Her anemia work-up revealed iron deficiency anemia. Multiple consultations between Obstetric and Cardiology Services concluded that the patient would not survive the pregnancy, and the Committee on Therapeutic Abortions agreed that termination was indicated. Abdominal hysterectomy under optimal conditions was decided upon, feeling this would minimize blood loss and possibility of infection. The patient was made aware of the risks of surgery and the risk of continuing pregnancy. Anesthesia was consulted.

The patient was then transfused with packed cells to a Hct. of 37%; and on 4/6/70, underwent cyclopropane general anesthesia; abdominal hysterectomy was performed. Anesthesia time was one hour; operating time was 45 minutes. Estimated blood loss was 200 cc. It was noted during surgery that the blood was quite dark, although the vital signs remained stable. In the recovery room, the patient remained quite depressed, and the initial pH was 7.15. She was given 700 cc. THAM, Isuprel, and maintained on assisted ventilation. She became slightly more alert and had some urinary output. The pH rose to 7.4 and was maintained without THAM. Central venous pressure rose to 20 cm. initially, but leveled at 14 cm. H_2O after 80 mg. of Furosemide.

The following morning she was taken off the respirator after blood gases were acceptable. She was treated with a 100 mg. bolus of Xylocaine, later in the day, for three episodes of bigeminy which readily responded and may have been secondary to the endotracheal tube, which was later removed.

On 4/8/70, the patient became febrile to 101.6. A chest film was read as left lower lobe density. Keflin, 2 gm. q. 6 h., was begun. Later that evening, she developed gross hemoptysis, although no rubs were heard and no obvious focus of emboli were noted. A lung scan revealed perfusion only at the apex on the left, but the heart filled the rest of the left chest. The patient was begun on heparin. Bowel sounds were active, and clear liquids were started.

Her course then became one of slow deterioration. The central venous pressure would rise and output decrease, but would respond to Furosemide. Isuprel could not be stopped or decreased; and on 4/10/70, the patient became restless and more dyspneic. The blood pressure fell to zero; a Levophed drip was started and the Isuprel increased. She continued to have dyspnea, tachycardia, low output, high central venous pressure, and low blood pressure.

On 4/13/70, the patient had a respiratory arrest followed by cardiac arrest. She vomited a large amount of greenish material and may have aspirated. Resuscitation with bicarbonate and epinephrine was successful, with a pH of 7.25 immediately after. She arrested three more times in the next 90 minutes and

could not be resuscitated after the last. She was pronounced dead at 1:53 p.m. Autopsy was obtained.

Postmortem Diagnosis

1. Idiopathic primary myocardopathy.
2. Congestive heart failure, acute and chronic.
3. Pulmonary edema.
4. Status-post abdominal hysterectomy.
5. Pulmonary emboli, right and left upper lobes, recent.
6. Cardiomegaly, right and left ventricles.
7. Intubation ulcers, superficial larynx.
8. Fibrocaseous granuloma, perihepatic lymph nodes.

Comment

The Committee on Maternal Mortality classified this death as a direct obstetrical preventable one. It is noted by the Committee that much deliberation had been undertaken before advising the termination of this pregnancy. It was after careful study by the physicians caring for her that it was estimated that her life expectancy without pregnancy was no more than 18 to 24 months, because of their previous experience with such severe cardiac disease. Therefore, the Committee on Therapeutic Abortions felt that termination of pregnancy was indicated, for the continuation of pregnancy would have certainly caused further deterioration in her cardiac status within a few short weeks.

PUBLIC HEALTH PAGE

Mercury in Kentucky Lake

WILLIAM P. MCELWAIN, M.D., M.P.H.

Commissioner of Health
Commonwealth of Kentucky

THE fish population of Kentucky Lake has been under continuous monitoring for mercury contamination since May, 1970. Periodic reports have been made to the several agencies concerned, including the Kentucky State Department of Health.

The most recent data (July, 1971) released by the Tennessee Valley Authority (TVA) at a meeting of the Tennessee Governor's Task Force on Mercury Pollution held August 16, 1971, indicates an increase in the number of fish containing levels of mercury in excess of the 0.5 ppm level set as safe by the Federal Food and Drug Administration (FDA). It was also noted that the observed levels were slightly higher than for the previous year.

The following recommendations have been made to the fish-consuming public:

1. That persons avoid consuming more than two meals per week of fish taken from Kentucky Lake. (This recommendation is for persons who eat Kentucky Lake fish each week the year-around. Vacationers and other occasional consumers of these fish need not be so limited.)
2. That pregnant women consume no such fish, for the same reasons that warrant other usual precautions during pregnancy.

The recommendations are based on all available data obtained from samplings collected from the lake and from the river below Kentucky Dam.

The samples in the lake have been analyzed over the past two years by the Tennessee Valley Authority (TVA) laboratories at Knoxville, Tennessee, and by the Federal Environmental Protection Agency (EPA) at their laboratories in Athens, Georgia. From December, 1970, to date, the average amount of mercury found in lake fish ranged from 0.4 to 0.8 parts per million (ppm).

In general, even in uncontaminated waters, fish may show mercury levels of up to 0.2 ppm.

Mercury levels in fish collected in the river below Kentucky Dam and tested by the State Health Department laboratories, by Murray State University, and by the TVA, EPA, and the Federal Food and Drug Administration (FDA) have shown a significant decline in mercury content since controls were imposed on the discharges of waste from the chemical plants at Calvert City in May, 1970. At that time, the average mercury level in fish collected below the dam was 0.34 ppm. Similar controls have been instituted and significant reductions noted in the amount of mercury discharged by a chemical plant at Muscle Shoals, Alabama, which serves as the source of mercury for fish in Tennessee River impoundments forming Pickwick and Kentucky Lakes.

Continued monitoring of the discharges from the plants at Calvert City is proving that effective controls are being maintained there.

Fish become contaminated chiefly by eating small marine animals which live on the muddy river or lake bottom. Mud samples taken before

the Calvert City plants reduced their mercury discharges into the river contained as high as 5.8 ppm. The latest samples contained 0.13 ppm.

Mercury levels in samples of the water itself, collected both above and below Kentucky Dam, contain less than 0.0005 ppm (0.5 parts per billion).

Game fish, such as bass, crappie, and bluegill, in general have higher concentrations of mercury than rough fish. Among rough fish, carp, drum, and redhorse have higher levels than catfish and buffalo.

Consumption of fish at current levels of mercury concentration present no danger to the public, if the year-around two meals per week and pregnant women recommendations are followed.

In cooperation with the Kentucky Department of Fish and Wildlife Resources and the federal agencies involved, the State Department of Health will continue and expand its surveillance of Kentucky Lake and other Kentucky waters. If and when the situation warrants, control measures will be instituted, and additional recommendations made to the public.

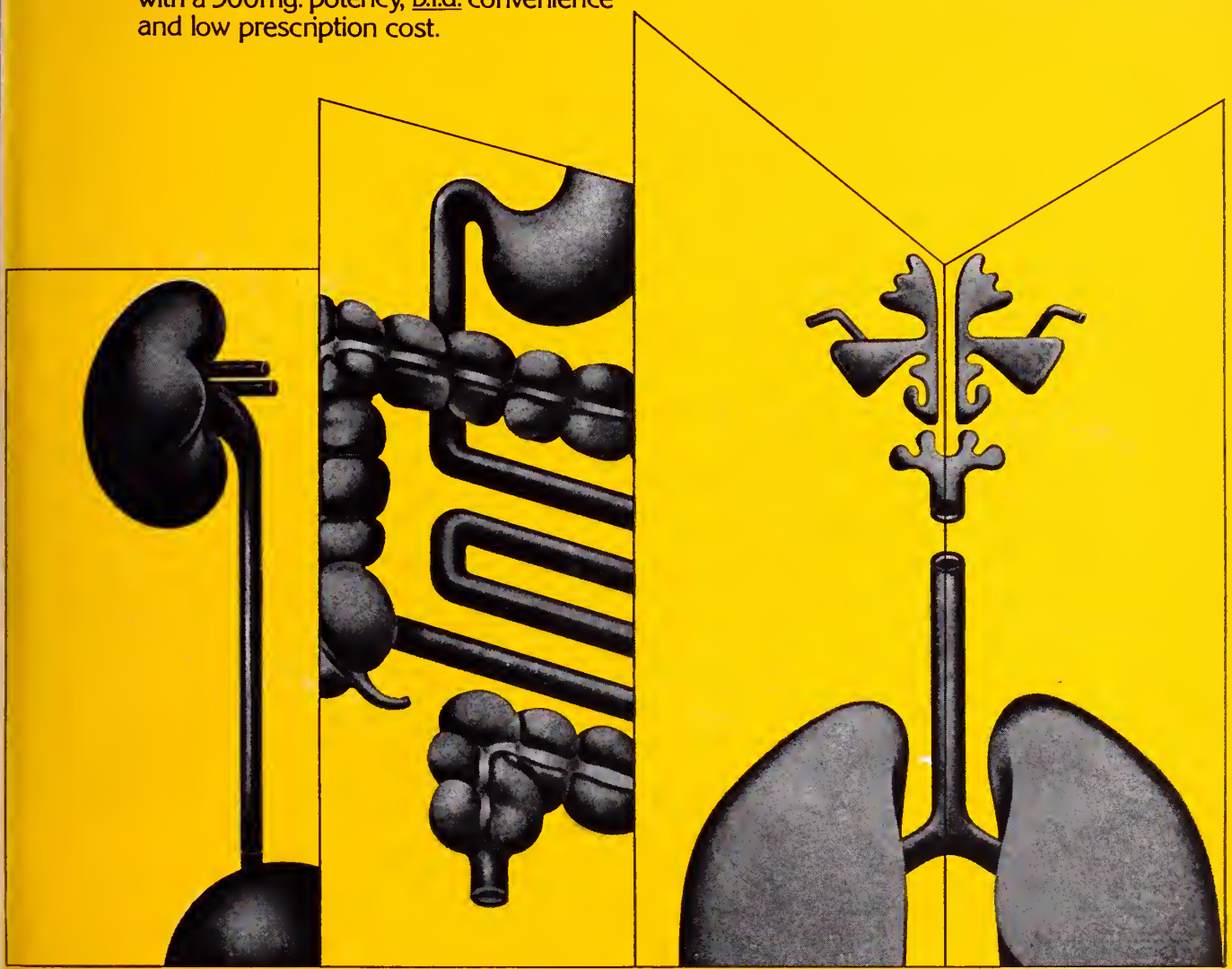
There is on page 861 of this issue of *The Journal of KMA* an article by J. Bradford Block, M.D., giving further details of the effects of mercury.

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Indications: Infections due to Rickettsiae, Mycoplasma pneumoniae (PPLO, Eaton agent), agents of psittacosis, Lymphogranuloma venereum, the spirochetal agent of relapsing fever.

Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should he performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usual Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

A.H.F.S. Category 8:12

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The convenient *b.i.d.* schedule lets the patient rest assured—while Gantanol fights the infection.

1:30 a.m. Antibacterial blood and urine levels build fast. Peak therapeutic effectiveness starts within 2 to 3 hours of the initial dose.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimeth amine in congenital toxoplasmosis); pregnancy at term an during nursing period.

Warnings: Safe use in pregnancy has not been estab lished, and teratogenicity potential has not been thoroughl investigated. Sulfonamides will not eradicate or prevent se quelae to group A streptococcal infections, *i.e.*, rheumati fever, glomerulonephritis. Deaths from hypersensitivity reac tions, agranulocytosis, aplastic anemia and other blood dys crasias have been reported; early clinical signs such as sor throat, fever, pallor, purpura or jaundice may indicate seriou blood disorders. Complete blood counts and urinalysis wit careful microscopic examination are recommended frequentl during sulfonamide therapy. Clinical data are insufficient o prolonged or recurrent therapy in chronic renal diseases o children under 6 years.

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Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

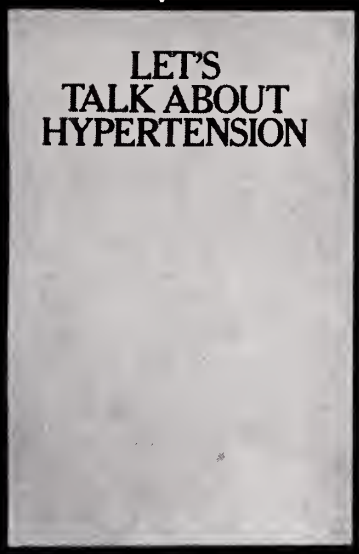
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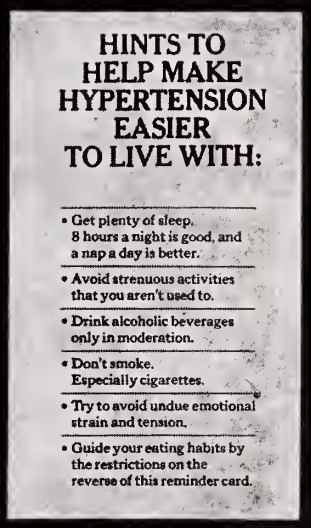
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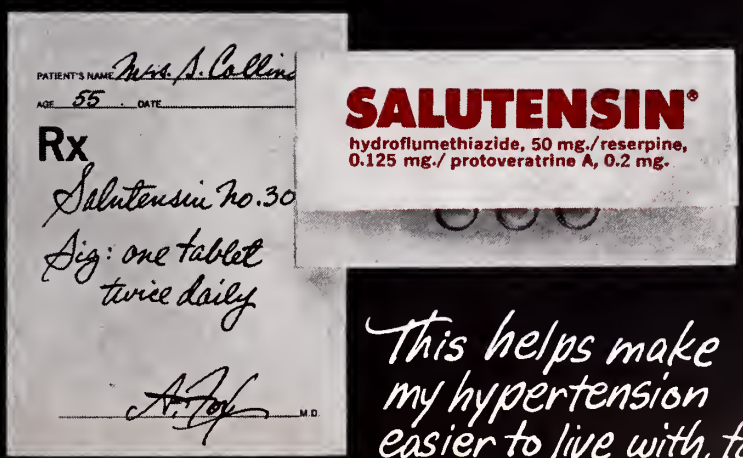
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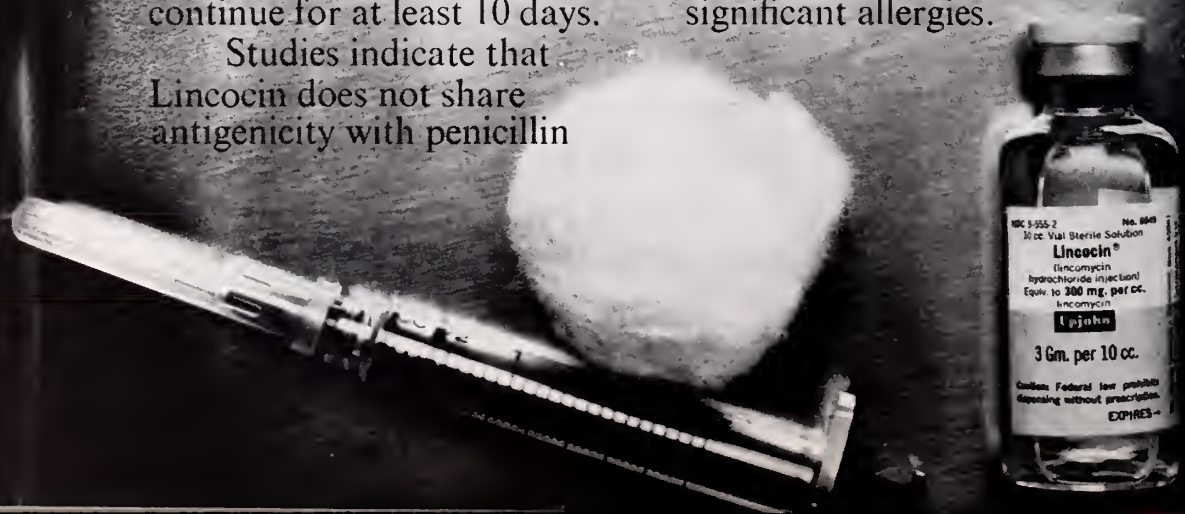
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• Sterile Solution (300 mg. per ml.)

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An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

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PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
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The JOURNAL of the
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VOLUME 69 NOVEMBER 1971 No. 11

Large Epidermoid Splenic Cyst

N. PARKE DAVIS, M.D.,* DAVID A. HULL, M.D.,** GORDON L. HYDE, M.D.*** AND JOHN M. STOECKINGER, M.D.****

Lexington, Kentucky

A case is presented of a large epidermoid (primary) cyst of the spleen that required splendectomy. A unique finding was the presence of an epidermoid cyst also in an accessory spleen.

THERE are numerous diagnostic possibilities for splenomegaly; however, because of its infrequent occurrence, the working diagnosis of a large splenic cyst is not often tendered.

Though first appearing in the literature in 1829,[1] as of 1964 there were only 435 cases found in the literature by Qureshi *et al*,[2] who updated a previous summary of world literature by Fowler.[3] One year later Qureshi[4] revised Fowler's classification to include all histologic types of primary splenic cysts published to that time. The review collected 43 splenic epidermoid cysts. In addition, they raised the question whether hypersplenism is causally related to splenic cysts.

The following case report, as those previously published, shows the difficulty of preoperative diagnosis and once again raises the question of the association of hypersplenism with splenic cysts.

*Surgical Resident
**Associate Clinical Professor of Surgery
***Assistant Clinical Professor of Surgery
****Clinical Instructor of Surgery
University of Kentucky College of Medicine, Lexington

Case Report

The patient, No. 173-713, a prepubertal white female, had a one month history of dull aching in the left upper quadrant, which was more noticeable with exercise. Otherwise she was asymptomatic and, in particular, there was no history of trauma, bruising, nor weight loss. Gastrointestinal symptoms were absent except for mild constipation. There was a family history of "dry skin."

Physical examination revealed a thin, white female with dry skin—temperature, 98.6 and blood pressure, 100/60. A large, smooth, firm mass in the left upper quadrant descended with respiration. Remaining physical examination was within normal limits.

Admission laboratory data revealed hemoglobin 13.3; WBC 5,500; corrected sedimentation rate 5; Reticulocyte count 0.2%; Prothrombin time 13/13 seconds; Alkaline phosphatase 106; and Platelet count, 100,000.

Initial clinical impression was that of early leukemia, lymphoma, or a secondary congestive splenomegaly. Peripheral smear showed 54 segs, 6 stabs, 30 lymphocytes, 4 monocytes, 1 eosinophile; iliac crest marrow showed normal erythroid and myeloid differentiation, but megakaryocytes were present in somewhat increased numbers. The question of mild idiopathic thrombocytopenic purpura was entertained.

A repeat platelet count was 96,000 and bleeding time was 7′30″. KUB showed



FIGURE 1

splenomegaly and on IVP (Figure 1) the left kidney was inferiorly displaced. An upper gastrointestinal series failed to reveal evidence of esophageal varices and the stomach was displaced to the right by the mass.

Without a definite diagnosis but with the possibility of portal hypertension in mind, a needle was introduced for a splenoportogram. A cloudly yellow fluid escaped under pressure, whereupon injection of 20 cc. Conray(R) 60 outlined a now obvious cystic space (Figure 2) and surgery was immediately performed.

At laparotomy, in addition to a large hilar cyst with splenic parenchyma laterally, an accessory spleen was located on the transverse colon. Both were removed, and the postoperative course was benign. One week postoperative the platelet count was 240,000 and four weeks postoperative it was 512,000 with 13.2 hemoglobin and weight of 75 pounds.

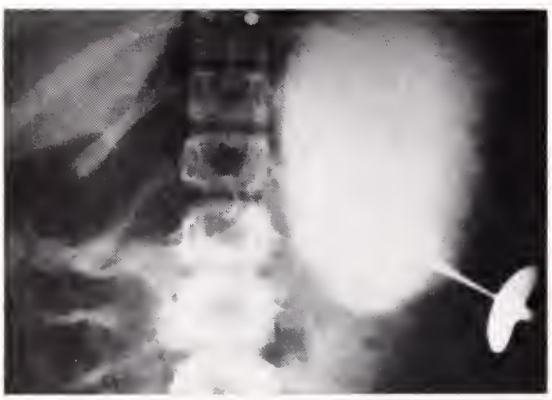


FIGURE 2

The spleen weighted 470 grams with a single large cyst measuring 9 x 8 cms; the accessory spleen weighed 15 grams and it, too, had a single cyst measuring 5 x 4 cms.

Histology of both cyst walls revealed an epidermoid lining. Splenic parenchyma was normal. There were a few foci of calcification in the cyst walls.

Discussion

This is the first case recorded of a true cyst occurring in an accessory spleen in conjunction with a primary cyst of the spleen.[5] This simultaneous occurrence gives strong support to the theory that these cysts are embryonic inclusion, rather than metaplasia of mesodermal elements.

The radiologic findings in large splenic cysts have been summarized by Forde and Finley[6] to be: 1) spreading of the lower ribs, 2) left diaphragm elevation, 3) gastric displacement to the right, 4) inferior displacement of the splenic flexure of the colon, 5) and left renal displacement, the latter of which this case well exemplified. Unfortunately these x-ray criteria are not specific and alone will not establish a diagnosis preoperatively.

Eban[7] reported a case in which a preoperative diagnosis was made by the injection of contrast media into a splenic cyst; however, this resulted from a diagnostic needle tap of the large spleen, which returned typical cystic fluid.

A case of splenic cyst published by Steidle and Cardy[8] had slightly decreased platelets and anemia that required splenoctomy. They raised the question of whether splenic enlargement per se could lead to hypersplenism.

Ferris *et al*[9] found one case of I T P and two cases of hypersplenism associated with large splenic cysts requiring splenoctomy. However, 14 other cases of splenic cysts requiring removal had no signs of hypersplenism and they felt the simultaneous presence of spleen cyst and decreased platelets, in these cases, was coincidental.

The deficit in platelet count present in this case preoperatively, returning to normal after

splenectomy, does indicate a causal relationship.

Surgical rationale agrees on the removal of a spleen involved with a large cyst for fear of future trauma and for establishment of diagnosis. The case published by Watkins[10] of spontaneous rupture and hemorrhage of a large epidermoid splenic cyst, adds strength to the argument for surgery.

References

1. Andral, Gabriel: Precis l'anatomie pathologique. Paris, *Gabon vl.* p. 432, 1829.

2. Qureshi, M. A., Hofner, C.D., and Dorchak, J.: Non-parasitic Splenic Cysts, Report of 14 Cases. *Arch. Surg.* 89:570, 1964.

3. Fowler, R. H.: Non-parasitic Benign Cystic Tumors of the Spleen. *S.G.O. (Int. Abstr. Surg.)* 96:209, 1953.

4. Qureshi, M. A., Hofner, C. D.: Clinical Manifestations of Splenic Cysts. *American Surgeon* 31:605-608, 1965.

5. Qureshi, M. A.: personal communications.

6. Forde, W. J., Finley, N.: Splenic Cysts *Clinical Radiology,* 12:49-54, 1961.

7. Eban, R. E.: Splenic Cyst with Pre-operative Diagnosis. *Brit. J—Radiol.* 32:821-823, Dec. 1959.

8. Steidle, R. M., and Cardy, J. P.: Solitary Cyst of the Spleen Associated with Hypersplenism. *The Journal Lancet,* 77:45-48, 1957.

9. Ferris, D. G., Docherty, M. B., and Heldon, R. A.: Cysts of the Spleen, *Minnesota Medicine* 41:614-618, 1958.

10. Watkins, G. L.: Epidermoid Cyst of the Spleen with Spontaneous Rupture and Massive Hemoperitoneum, *Missouri Med.* 67:106-107, 1970.

Manuscript Memos

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Islet Cell Tumors and Hyperinsulinism: A Case Report

Romeo S. Berardi, M.D.*

This paper discusses some aspects of the physiology, pathology, symptomatology, and diagnosis of hyperinsulinism and islet cell tumors. The case presented illustrates many important features which have been commented upon. An additional surgical maneuver is suggested.

ISLET cell tumors associated with hyperinsulinism have excited the imagination of many surgeons. When benign, its dramatic clinical symptomatology can favorably be reversed by its removal. The malignant form of the disease carries an obvious poorer prognosis, but a few scattered reports have appeared demonstrating long-term survival.[1, 33]

The entity was first brought to our attention in 1902,[2] at which time the islet cell adenoma of the pancreas was described. Its clinical manifestations were first reported in 1924 by Harris,[3] who described a symptom complex of "hunger, weakness, and anxiety neurosis." The first case of malignant islet cell tumor associated with hyperinsulinism and hypoglycemia was described in 1927.[4] Operative cure of an adenoma of the islet cells of the pancreas was reported in 1929.[5] This was characteristically associated with convulsions and coma. Reviews of proved islet cell tumors have been reported by various authors.[6, 7]

Physiologic Considerations

Hyperinsulinism results from an overproduction of insulin from the islet cell tumor which leads to hypogylcemia. With a significant decrease in the blood glucose level below the critical level to maintain adequate metabolism of the brain, mental confusion, muscular incoordination, convulsions, and loss of consciousness result. There is a closely similar relationship between the effects of anoxia and hypoglycemia on brain function which supplement one another. Hypoglycemic convulsions are induced more readily in the presence of anoxia, and the effects of the latter are more severe if blood glucose is depressed. Glucose is known to be present in the brain in about the same concentration as in the blood and is the main substance for internal respiration of gray matter. The gray matter is extremely susceptible to deprivation or oxygen and glucose, especially so in the higher centers.[8]

This physiologic consideration concerning the metabolism of the brain is intended to make one cognizant of the urgency which is required in establishing an early diagnosis, so that proper treatment may be instituted. An untreated case may lead to death in short order. Repeated undetected attacks may lead to irreversible brain damage, which leads to psychiatric treatment and confinement of some patients.

The functional activity of the tumor does not appear to be directly related to the size of the tumor, but rather to the type and differentiation of the cells composing it.[9] From a clinical point of view, it is apparent that the tumor does not maintain a continuous secretion of insulin, nor does it appear to fall under the normal regulatory mechanisms of insulin secretion. An exaggerated response may result after a glucose load with continuous insulin secretion, even in face of severe hypoglycemia. Since normal islets are composed principally of beta cells, it has been suggested that the severity of symptoms may be related to the degree of similarity of the majority of cells to beta cells.[9] A functionally inactive tumor composed almost exclusively of the delta type islet cells has been reported.[10]

Spontaneous remissions have been known to occur.[11] The explanation is that epinephrine is released, which, in turn, liberates glucose from glycogen storage areas. Insulin has been shown to relieve an attack.[12] However, once an attack is begun, it can usually be controlled by the oral or intravenous administration of glucose, resulting in a dramatic improvement of

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the patient. This effect also carries with it a very significant diagnostic value. Patients usually become aware of the fact that by eating "sweets" these attacks can be avoided. This may result in obesity, a not too unusual finding.

Pathology

Islet cell tumors make up a small fraction of all pancreatic neoplasms.[13] They occur at any age, but with greatest frequency between the ages of 30 to 50 years. Those in the lower age groups are more frequently associated with hypoglycemic manifestations. The incidence is slightly greater in males. It is estimated that 90 per cent of individuals under the age of 30 with islet cell adenomas have severe hypoglycemic attacks.

The most frequent location is in the tail of the pancreas, but the body and head are by no means excluded. In about 12 per cent of the cases, more than one tumor is present, being ectopically located in 2 per cent.[14]

The size of the tumor varies from 1.2 mm to 15 cm in the reported cases, but the majority are between 1 and 2 cm in diameter. They are usually circumscribed and sometimes encapsulated, of a reddish-gray color, and homogeneous in appearance, lacking the fine lobulation characteristic of normal pancreas. Rich vascularity is often a marked feature. The tumor is firmer than the surrounding pancreatic tissue. Histologically, the tumor cells have a morphology and arrangement resembling those of the islets of Langerhans. A small proportion are malignant, between 10 and 12 per cent. There also occurs a group of islet cell tumors in which certain histologic features, such as incompleteness of the capsule, or invasion of the capsule, adjacent pancreatic tissue or blood vessels,[15] suggest a malignant nature. Evidence indicates that islet cell tumors may be derived by differentiation from epithelium of pancreatic ducts.[16]

Clinical Evaluation

Most large series dealing with this entity attest to the common findings of central nervous system disturbances, such as loss of consciousness, confusional state, weakness and fatigue, deep coma, drowsiness and stupor, light-headedness, amnesia, chronic convulsions, etc.[7] The humiliation to which some patients have been subjected because of misdiagnosis has been and is an intolerable situation. One can only wonder about the degree of mental anguish that may have remained in some patients after appropriate, albeit delayed, treatment has been instituted. One can only wonder how many patients exist who are presently being treated for episodic "peculiar behavior" only to be suffering from hyperinsulinism due to an islet cell adenoma.

Hyperinsulinism has been divided into functional and organic. The former is by far the more common; but since organic hyperinsulinism demands surgical intervention and in fact is curable, then it becomes imperative to establish a definitive diagnosis. The etiology of hypoglycemia is much varied. Williams[17] lists deficient food supply, starvation, excessive elimination from the body, overutilization, abnormal metabolism, hepatic disorders, hypersecretion of insulin, decreased insulin antagonism, pharmacologic factors, as well as other agents. Of greatest importance to the surgeon are the uncommon giant mesenchymal tumors which may lead to profound hypoglycemia that cannot be distinguished from hyperinsulinism.[18, 19] In adenomatosis of endocrine glands, some of the manifestations must be considered as possibly being due to hyperinsulinism. Insulinomas may also be associated with the Zollinger-Ellison tumor.

Although unexplained coma or seizures are now more regularly investigated for a possible hypoglycemic origin, in order to realize further progress in the detection of adult patients with hyperinsulinism, dePeyster[20] has suggested the following for investigation:

1. Patients said to have experienced fainting spells, "little strokes," petit mal epilepsy, narcolepsy, or other disturbances of consciousness, however slight.

2. Patients with voracious appetities, particularly at night and with a penchant for candy, and those who have experienced a rapid unexplained weight gain.

3. Patients undergoing neuropsychiatric evaluation for paroxysmal behavior disorders or transient neurologic deficits. All "acute alcoholics" who deny drinking.

Functional hypoglycemia remains the most common and often the most difficult type to distinguish from organic disorders of the islet cells. Included are patients in whom rapid changes in blood sugar levels are presumed to

result from dysfunction of the autonomic nervous system. Its frequency in middle-aged women with emotional disturbances, gastrointestinal hypermotility, and the occurrence of cyclical edema and unexplained weight gain lend credence to this difficulty.[21] In general, patients with functional hypoglycemia have attacks at irregular intervals unrelated to exercise or fasting and show little tendency toward progression in the severity of symptoms.

Although the symptomatology of hypoglycemia is more closely related to the rate of fall of blood sugar than to the absolute level reached, the diagnosis of functional hypoglycemia should be entertained reluctantly where major disturbances of consciousness are observed and blood sugar levels regularly fall below 50 mgm%.

The twelve hour fasting test still remains the first step in establishing the diagnosis. The blood sugar should typically fall below 50 mgm% after the fasting period. Prompt relief of symptoms with the oral or intravenous administration of glucose adds further firmness to the diagnosis. The tolbutamide test[22] has shown itself to be most valuable diagnostically and represents the most reliable objective method of distinguishing between organic and functional causes of hyperinsulinism.[23, 24] Glucose values below 50 mgm% and concomitant plasma insulin determinations at five minute intervals, above 151 microunits, are considered significant. The 1-leucine test has more recently received much clinical consideration. The leucine-sensitive hypoglycemia is characteristic of some patients with insulin secreting tumors and is rarely encountered in normal individuals or those with functional hypoglycemia of either the autonomic or pre-diabetic type. The mechanism of both these drugs is believed to be, at least in part, a stimulus to increased elaboration of insulin by the tumor cells. There is some evidence to suggest that leucine potentiates the action of insulin at the cellular level.[25, 26]

The oral or intravenous glucose tolerance, insulin sensitivity, epinephrine, glucogen, and other tests remain unreliable.[1, 20]

Angiographic visualization has proven to be helpful in establishing the presence of islet cell tumors; this is largely dependent on the degree of vascularization which characterizes these tumors.[27, 28, 29]

Whipple[30] and Warren[1] list the following criteria as satisfying the need for operation:

1. The attacks must come during periods of fasting or after extreme exertion.
2. The blood sugar value during an attack or after 12 hours of fasting must be below 50 mgm%.
3. The symptoms must be relieved promptly by the oral or intravenous administration of glucose.
4. The symptoms must be severe enough to cause stupor or loss of consciousness.
5. Diseases, other than those of the pancreas, which are capable of producing hypoglycemia must be excluded.
6. The self-administration of insulin must be ruled out.

Case Report

A 73 year old white female was admitted to the McDowell Appalchian Regional Hospital on 9-26-64, with the chief complaints of being restless, incoherent, and disoriented, as noted by members of the family.

The past history was noted to be extremely interesting and, therefore, will be given in some length. The patient had five previous admissions to this hospital: the first being on 4-15-60, at which time she was admitted because of syncopal attacks. Pertinent laboratory data revealed a fasting blood sugar of 48 mgm% and 100 mgm% on two different occasions. A lumbar puncture was also performed and revealed 64 mgm% of glucose. The patient was treated symptomatically and discharged improved with the final diagnosis being deferred. Comment by the attending physician in the discharge summary was that he felt the patient's complaints were either due to hysteria or (?) hypoglycemia.

The second admission was on 5-22-62, at which time she complained of syncopal attacks. A glucose tolerance test was performed and revealed a fasting blood sugar of 76 mgm%; the 30 minute being 120 mgm%; 1 hour, 190 mgm%; 2 hour, 257 mgm%; and the 3 hour blood sugar, 137 mgm%. The patient was discharged improved with a final diagnosis of conversion hysteria and diabetes mellitus.

The third admission occurred on 6-8-62. The patient had been found semicomatose and

unresponsive. A fasting blood sugar was obtained on admission and revealed it to be 36 mgm%, and on the following morning, 48 mgm%. A glucose tolerance test revealed the 30 minute specimen to be 138 mgm%; 1 hour, 180 mgm%; 2 hour, 158 mgm%; and at 3 hours the blood sugar was 87 mgm%. The patient was discharged improved with the diagnosis of functional hypoglycemia and possible islet cell adenoma of the pancreas.

The fourth admission was on 6-20-64, because of convulsive seizures. The fasting blood sugars were 55 mgm%, 102 mgm%, 48 mgm%, and 57 mgm% on four different occasions. Seventeen-ketogenic steroids revealed 2166 mgm% in a 24 hour urine specimen—definitely abnormal. An epinephrine tolerance test revealed the following: fasting blood sugar, 68 mgm%; at 30 minutes, 171 mgm%; at 1 hour, 175 mgm%; at 2 hours, 145 mgm%; and at 3 hours, 70 mgm%. The patient was discharged improved with diagnosis of hypoglycemia and cerebral arteriosclerosis.

The fifth admission was on 9-6-64, and was necessitated because of episodes of agitation and irrational behavior. During one of the episodes she fell sustaining a fracture of the right wrist. Fasting blood sugars were 120 mgm%, 65 mgm%, and 79 mgm% on three occasions. A glucose tolerance test revealed the following: at 30 minutes, 230 mgm%; at 1 hour, 280 mgm%; at 2 hours, 300 mgm%; at 3 hours, 280 mgm%; at 4 hours, 185 mgm%; and at 5 hours, the blood sugar was 109 mgm%. Liver function tests, serum amylase, 17-ketosteroids, serum lipase, serial calcium, and phosphorus were all within normal limits. The patient was discharged improved with the diagnosis of hypoglycemia, functional, and Colles fracture, right.

The sixth and final admission was on 9-26-64, because of restlessness, incoherency, and disorientation. Fasting blood sugars were 52 mgm%, 70 mgm%, and 85 mgm%, on three separate occasions. A prolonged fasting test was carried out and the blood was drawn at two hour intervals with the following results: 85 mgm%, 70 mgm%, 57 mgm%, 50 mgm%, and 46 mgm%, at which point the patient manifested CNS symptoms. This test was repeated some 10 days later and the following results were obtained: 79 mgm%, 73 mgm%, 60 mgm%, and 36 mgm%. Surgical consultation was requested and an exploratory laparotomy was carried out on 10-23-64. A 1 cm adenoma was found on the posterior surface of the tail of the pancreas and a 60 per cent distal pancreatectomy was executed. Microscopic tissue examination revealed, within the pancreatic tissue, a nodule composed of a large number of islands of Langerhans, the epithelial cells of which were quite hyperplastic, uniform and having, in most cases, the usual architecture. Separating the islands was a dense fibrous tissue stroma somewhat trabeculated. A capsule of fibrous tissue was noted around the nodule, and adjacent to it was normal pancreatic tissue. Diagnosis: Islet Cell Adenoma (Figure 1).

Postoperative blood sugars taken in the fasting state were 440 mgm%, 171 mgm%, 128 mgm%, 115 mgm%, and 193 mgm%, obtained in that order. On 12-1-64, the patient had a sudden and acute episode of respiratory distress with cyanosis, rapidly went into shock, and died. Autopsy revealed an extensive pulmonary embolus in the left main pulmonary artery.

Comment

The case presented clearly establishes the contention that suspicion must be high if the diagnosis of hyperinsulinism due to islet cell tumors is to be entertained. It was only after the sixth admission that any serious consideration was given to this latter entity. The increasing frequency and progressive nature of central nervous system manifestations, as demonstrated by this patient, are further exhibited

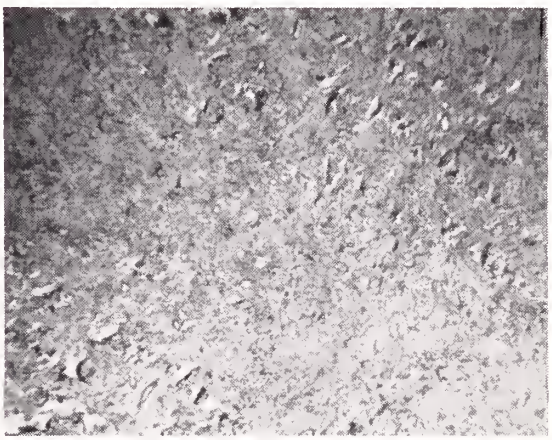


FIGURE 1 Photomicrograph (4.5 x) of islet cell adenoma demonstrating islands of Langerhan surrounded by a dense fibrous stroma.

by the short time interval between the last two admissions—only 20 days. This case further underlines the slow but progressive mental deterioration which at times characterizes this disease. The danger of interpreting a fasting blood sugar below 50 mgm% as functional hypoglycemia, without proper exclusion of organic causes, is apparent. The fasting test had to be prolonged to 18 hours before obtaining a glucose level below 50 mgm% in this case.

The treatment of islet cell tumors has been widely discussed.[31, 32, 33, 34, 35, 36, 37] An important point demonstrated by this case is that the tumor was not found after executing the customary maneuvers suggested for adequate exploration of the pancreas. When no tumor was noted even in the usual heterotopic sites, it was decided to mobilize the tail of the pancreas along with its inferior margin up to the superior mesenteric vessels. It was only after elevating the pancreas and examining its distal posterior surface that the tumor was noted. This maneuver is suggested as being most worthwhile in those cases in which a tumor is not noted on the anterior surface of the pancreas or on the posterior surface of the head of the pancreas after kocherization. In this way, fewer blind resections might result.[31]

The patient was rendered diabetic in the postoperative phase, a finding presumably indicative of a definitive procedure.[38] She was, however, easily controlled and mentally clear up to the time of death, indicating a possible reversibility of what may appear to be clinically progressive mental deterioration.

Summary

A case of hyperinsulinism due to benign islet cell tumor has been presented. A delay in diagnosis can be eliminated with a high index of suspicion. An additional technical maneuver is suggested in order to lessen the incidence of blind pancreatic resection.

References

1. Warren, K. W.: Islet cell tumors and hyperinsulinism. *Surg. Cl. Path. Amer.* 42:709, 1962.

2. Nickolls, A. G.: Simple adenoma of the pancreas arising from an island of Langerhans. *J. M. Res.*, 8:385, 1902.

3. Harris, S.: Hyperinsulinism or dysinsulinsim. *JAMA* 83: 729, 1924.

4. Wilder, R. M., Allan, F. N., Power, M. H. and Robertson, H. E.: Carcinoma of islands of the pancreas, hyperinsulinism, and hypoglycemia. *JAMA* 89:348, 1927.

5. Graham, R.: Quoted by Howland, G., Campbell, W. R., Maltsy, E. J., and Robinson, W. L.: Dysinsulinism: Convulsion and coma due to islet cell tumor of the pancreas, with operation and cure. *JAMA* 93:674, 1929.

6. Moss, N. H., and Rhoads, J. E.: Hyperinsulinism and islet cell tumors of the pancreas. In Howard, J. M., and Jordan, G. L.: *Surgical Diseases of the Pancreas.* Philadelphia, J. B. Lippincott Co., p. 321, 1960.

7. Crain, E. J., and Thorn, G. W.: Functioning pancreatic islet cell adenomas. *Medicine* 28:427, 1949.

8. Best, C. H., and Taylor, N. B.: *The Physiological Basis for Medical Practice.* Williams & Wilkins Co., Baltimore. PF 673, 1950.

9. Campbell, W. R.; Graham, R. R.; and Robinson, W. L.: Islet cell tumors of the pancreas. *Am. J. Med. Sci.* 198:445, 1969.

10. Anderson, W. A. D.: *Pathology.* C. V. Mosley Co., St. Louis, p. 859, 1953.

11. Peters, H. E., and Stamten, A.: Pancreatic rejection for hypoglycemia in children. *Amer. J. Surg.* 110: 198, 1965.

12. Gammon, G. D., and Tereny, W. C.: Hypoglycemia, the clinical syndrome, etiology and treatment; report of a case due to hyperinsulinism. *Arch. Int. Med.* 47:829, 1931.

13. Frantz, V. K.: Tumors of the Pancreas. *Atlas of Tumor Pathology,* Sect. VII, Fasc. 27 and Fasc. 28, Armed Forces Institute of Pathology, Washington, D. C., 1959.

14. Scheinin, T. M., and Tala, E.: Diagnosis and treatment of pancreatic islet cell adenomas. *Acta. Chir. Scandinav.* 132:590, 1966.

15. Whipple, A. O.: Pancreatoduodenectomy for islet carcinoma. *Ann Surg.* 121:847, 1945.

16. Duff, G. L.: Pathology of islet cell tumors of the pancreas. *Am. J. M. Sc.* 203:437, 1942.

17. Williams, R. H.: *Textbook of Endocrinology.* 4th ed., W. B. Sanders Co., Philadelphia, 1968.

18. Missan, S., Bar Maor, A., and Shafrin, E.: Hypoglycemia associated with extrapancreatic tumors. *New Eng. J. Med.* 278:177, 1968.

19. Olegsky, S., Bailey, I., Samols, E., and Bilkus, D.: A fibrosarcoma with hyperglycemia and a high serum insulin level. *Lancet J.*: 378, 1962.

20. dePeyster, F. A., and Gilchrist, R. K.: Clinical response of spontaneous hypoglycemia to dietary and drug therapy. JAMA 155:844, 1954.

21. Hunt, P. S.: Differential diagnosis and management of hypoglycemia. *Surg. Gynec. & Obst.* 125:371, 1967.

22. Fajans, S. S., and Conn, J. W.: Intravenous tolbutamide test. *J. Lab. Clin. Med.* 54:811, 1959.

23. Tompkins, R. A., Hardacre, J. M., Tsagournis, M., and Greider, M.: Definitive diagnosis in insulin-secreting tumors of the pancreas. *Surg. Gynec. & Obst.* 125:1069, 1967.

24. Floyd, J. C., Fajans, S. S., Knopf, R. F., and Conn, J. W.: Plasma insulin in organic hyperinsulinism — comparative effects of tolbutamide, leucine and glucose. *J. Clin. Endocrinol.* 24:747, 1964.

25. Schwartz, T. B., Flanagan, G. C., Stuppy, G. W., and Tarun, D. W.: The hypoglycemic effect of l-leucine in organic hyperinsulinism. *J. Lab. Clin. Med.* 54:944, 1959.

26. Buse, J., Marshall, J. N., Bradham, R., Oberman, H., and Buse, M. G.: Functioning pancreatic islet cell adenoma with leucine-induced hypoglycemia. *Arch Int. Med.* 112-583, 1963.

27. Madsen, B.: Demonstration of pancreatic insulinomas by angiography. *Brit. J. Radiol,* 39:488, 1966.

28. Rosch, J.: *Roentgenology of the Spleen and Pancreas.* Springfield, Illinois. Charles C. Thomas, 1967.

29. Epstein, H., Abrams, R. M., Beranbaum, E. R., and Localio, S. A.: Angiographic localization of insulinomas, high reported success rate and two additional cases. *Ann. Surg.* 169:349, 1969.

30. Whipple, A. O.: Hyperinsulinism in relation to pancreatic tumors. *Surgery* 16:289, 1944.

31. Mengoli, L., and LeQuesne, L. P.: Blind pancreatic resection for suspected insulinoma, a review of the problem. *Brit. J. Surg.* 54:749, 1967.

32. Fonkalsrud, E. E., Pilley, R. B., and Longmire, W. P., Jr.: Insulin secreting tumors of the pancreas. *Ann. Surg.* 159:730, 1964.

33. Kerner, J. S., Scofield, G., Koucky, C., Benietz, R. O., and Ackerman, L. V.: Long survival with islet cell carcinoma of the pancreas. *Amer. J. Clin. Path.* 39:137, 1963.

34. dePeyster, F. A.: Planning the appropriate operations for islet cell tumors of the pancreas. *S. Cl. N. Am.* 50:133, 1970.

35. Hartsuck, J. M., and Brooks, J. R.: Functioning beta islet cell tumors. *Amer. J. Surg.* 117:541, 1969.

36. Laroche, G. P., Ferris, D. O., Priestley, J. T., Scholz, D. A., and Dockerty, M. O.: Hyperinsulinism: surgical results of management of occult functioning islet cell tumors. Review of 154 cases. *Arch. Surg.* 96:763, 1968.

37. Livingston, R. B., and Carter, S. K.: Streptozotocin (H. S. C. 85998). National Institute of Health. *Cancer Chemotherapy,* 1969.

38. dePeyster, F., and Gilchrist, R. K.: Surgical aspects of spontaneous hypoglycemia due to insulinism. *AMA Arch. Surg.* 67:330, 1953.

"Run-Away" Plastic Catheter†

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"Run-away" plastic catheter can be managed successfully by surgical and medical means. Cases with no serious complicating disease, wherein the catheter is localized, are treated surgically. Unlocalized catheters and those with prohibitive risk are best suited for medical therapy.

Since the introduction of plastic catheters by Meyers in 1945,[1] there have been mounting reports on various complications associated with them. Clinical consequences such as phlebitis, thrombosis, sepsis, although frequently ignored, have been demonstrated to occur rather often.[2, 3, 4, 5] A more significant and serious complication which can lead to disastrous result is a "run-away" plastic catheter (catheter embolization).

Twell *et al,*[6] as early as 1948, on the basis of a single experience with "run-away" plastic catheter on a dog, warn against the possibility of occurrence in clinical practice. It was not until 1954, however, that Turner and Sommers reported the first human case.[7] Other reports subsequently followed, and in 1967, Doering *et al*[2] reviewed the literature and found 26 cases, to which they added 23 other unpublished ones. Although the number reported is not by any means large, there is reason to believe that it happens more frequently than suspected. To substantiate this suspicion, Ross[8] interviewed his staff, and found that 12 of the 15 individuals were aware of one or more unreported cases.

The lethal consequence of an embolized catheter was first reported by Ayers[10] in 1957, and has since been recognized by others.[2, 9, 11] The mortality rate is 8.7 to 23 per cent.[2] Taylor and Rutherford[9] reviewed the literature in 1963 and found 11 reported cases. Seven died, five directly due to the infected catheter, and two from other causes. Of the remaining four, two had operative removal, while the other two were left untouched. Bernhardt *et al,* in 1970,[11] in a review of the American literature on intracardiac catheter embolization, found that among the untreated cases, 61 per cent died from directly related complications. In the 34 patients in whom the catheter was removed, all were alive and symptom free.

The complications are numerous and all life threatening. Among them are: sepsis, endocarditis, thrombosis, myocardial perforation, myocardial necrosis, arrhythmias, and pneumonia. There is no treatment universally applicable to all cases. Some authors [11, 12, 13, 14, 15, 16, 17] advocate early removal of embolized catheter, whether operatively or by nonsurgical means with the use of flexible instruments for extraction. On the other hand, instances have been known where it was tolerated for months or years without any harmful effects.[2, 3, 9] We are of the opinion that both surgical and medical management can be used to an advantage based on each individual case.

The following three interesting cases we have recently treated will be presented to illustrate our flexible attitude in managing "run-away" plastic catheter.

Case I

J. B., a 58-year-old white female, had a craniotomy for bleeding intracranial aneurysm. During the postoperative period, a plastic catheter in the arm accidentally broke, and was later demonstrated by plain chest x-ray to have migrated into the left main pulmonary

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artery (Figure 1). No attempt to retrieve the catheter was made at that time, as the patient was asymptomatic until two months later, when it was removed electively because of increasing personal concern. The operative procedure was performed utilizing a left thoracotomy incision. Through a transverse arteriotomy at the left main pulmonary artery, the catheter was extracted (Figures 2 and 3). The postoperative course was uneventful.



FIGURE 1 Case I: Plastic catheter visualized in the left main pulmonary artery in a plain chest x-ray.

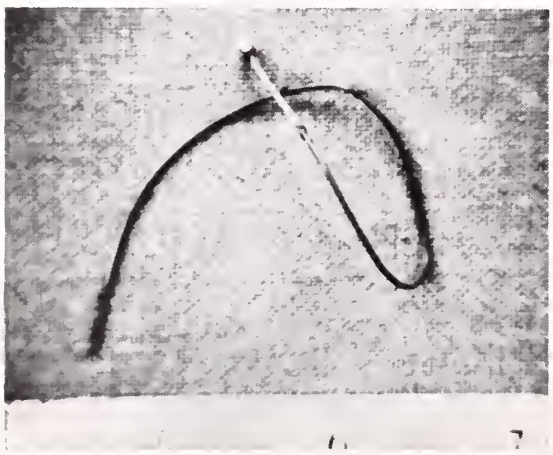


FIGURE 2 Case I: Plastic catheter removed two months after embolization.



FIGURE 3 Case I: Technique of extraction of the plastic catheter in the left main pulmonary artery through a transverse arteriotomy incision and repair.

Comment

Removal of the catheter at the left main pulmonary artery, although asymptomatic, was undertaken because of increasing personal worry of the patient and because the procedure did not require any extraordinary risk.

Case II

D. M., a 19-year-old white female, had a double valve replacement for a mitral and tricuspid valve disease. In the postoperative period, she developed multiple episodes of ventricular tachycardia and fibrillation requiring insertion of a percutaneous transvenous pacemaker. During the procedure, a fairly rigid polyethylene catheter accidentally slipped into the subclavian vein. Angiographic studies appeared to localize the catheter at the innominate vein. However, during the exploration, the catheter could not be found and no further operative intervention was undertaken. Since anticoagulants and antibiotics were being administered for the valve replacement, no other medications were deemed necessary for the lost plastic catheter. Close follow-up postoperatively has been free of any complications.

Comments

The inability to find the catheter on exploration discouraged any further attempt at finding it. Anticoagulants and antibiotics being

given for the valve replacement served a dual purpose of preventing complications from the embolized catheter.

Case III

E. D., a 64-year-old white female, was admitted in a semicomatose state. A subclavian vein catheter was inserted for parenteral fluid therapy. A nurse later found that the catheter was kinked and decided to cut it. She reattached the needle to the catheter near the skin and anchored it with tape. Subsequently, the catheter slipped into the subclavian vein, leaving the needle outside. Angiographic studies failed to localize the catheter. The patient was anticoagulated parenterally and covered with antibiotics. Pneumonia of the left lower lobe developed, but later resolved with treatment.

Comments

The inability to localize the catheter was a deterrent to a surgical procedure. Early administration of anticoagulants and antibiotics were instituted to prevent a major complication from developing. Whether the pneumonia was caused by the catheter or not is open to conjecture.

Discussion

The successful management of "run-away" plastic catheter can be achieved both by medical and surgical means. In dealing with foreign bodies, although the main objective is for its removal, it is never axiomatic that it has to be removed in every case. The treatment should be tailored to suit each individual case, avoiding any fixed and rigid approach and utilizing the best course that could attain the best result with the least possible risk.

No single factor predisposes catheter embolization. It seems to occur more among restless and confused patients. Careless handling of the catheter during insertion and in changing the dressing, as well as the innate nature of the catheter with a low breaking point, have been the causes in several occasions. Likewise, the sharp end of the needle can cause shearing of the catheter. Inadequate attachment of the catheter to the needle or skin has resulted in the escape of the catheter into the vein.

The foremost concern, should the accident occur, is to stop the travel of the catheter before it reaches the larger blood vessels within the confines of the body cavities. A proximal tourniquet has to be applied immediately and venous cut-down distal to the tourniquet has to be performed to retrieve peripherally located catheter. If the catheter is not located peripherally, then effort is exerted to prevent thrombosis by administering parenteral anticoagulant. Concomitantly large doses of antibiotics to protect against gram negative and gram positive sepsis are administered. After the above is initiated, one can then concentrate on localizing the catheter both by plain x-ray and angiography. Despite the radiolucent nature of the catheter, it can at times be visualized without contrast media (Figure 1). Angiography, however, is the procedure which has yielded the greatest instances of localization. A linear filling defect within the injected contrast media is the characteristic angiographic finding.[18]

The importance of localizing the catheter can not be overstated. As a rule, no major surgical attempt to retrieve a catheter should be undertaken without localizing it first. If the catheter is demonstrated, one has the option of either removing it or treating it medically. Catheters in major venous blood vessels, i.e., subclavian, innominate and vena cava, are easily removed with very little risk. Catheters lodged in the pulmonary artery are retrieved via a pulmonary arteriotomy (Figure 3). Those in the heart chambers present an entirely different problem. The operation itself definitely carries a certain amount of risk. In a young individual with no other serious contraindicating diseases, it is better to remove the catheter either by a close heart procedure via the right atrium, or an open heart with cardiopulmonary assist. In older individuals with prohibitive complicating disease, it is probably best if treated medically. We prefer to initiate anticoagulation by parenteral means for one week, then maintain the therapeutic level with oral anticoagulant for three to four weeks. Antibiotics are also given for one week parenterally at first—then orally for one month. One then observes the patient for signs of thrombosis, septicemia, or endocarditis. If it does occur, every effort should be exerted to remove the catheter.

The use of percutaneous method of extraction of foreign bodies in the major vessels with the aid of flexible or rigid instruments has been successful in some cases. Its application, however, is limited to those found in the great venous vessel before they reach the chambers of the heart. Once the catheter is inside the heart, it is hazardous to attempt to retrieve it, due to the danger of damaging the valves, chordae or perforating the myocardium. We prefer direct surgical approach when feasible, and for those where surgery is contraindicated, medical treatment should be carried out.

Summary

Three cases of "run-away" plastic catheter, managed successfully, illustrate an attitude of flexible treatment which we have adopted. Catheters lodged in great vessels as well as in the pulmonary artery are easily retrieved with minimal risk. Those in the heart chambers, even if asymptomatic, should be removed if the general condition of the patient warrants. Patients with serious complicating diseases which preclude a major operation, and among those with unlocalized catheter, should be treated with anticoagulants and antibiotics for at least one month and observed closely for any complications.

References

1. Meyers, L.: Intravenous Catheterization. *Am. J. Nursing.* 45:930-931, 1945.

2. Doering, R. B., Stemmer, E. A., and Conally, J. E.: Complications of Indwelling Venous Catheters. *Amer. J. Surg.* 114:259-266, 1967.

3. Tulgar, H., and Budnity, J.: Prolonged Survival After Catheter Embolus. *Ann. Int. Med.* 59:564-565, 1963.

4. Drugkin, M. S., and Seigel, P. D.: Bacterial Contamination of Indwelling Intravenous Polyethylene Catheters. *JAMA* 185:966-968, 1963.

5. Fekety, E. R., Jr., and Thoburn, R.: Nature of Prevention of Intravenous Catheter Infection. *John Hopkins Med. J.* 121:134-135, 1967.

6. Twell, S. W., Martin, W. B., and Kaufman, H.: Complication from the Use of Plastic Intravenous Tubing. *Northwest Univ. Med. Sch. Quarterly Bulletin* 22:353-355, 1948.

7. Turner, H., and Sommers, S. C.: Accidental Passage of Polyethylene Catheter from Cubital Vein to Right Atrium. *New Eng. J. Med.* 251:744-745, 1954.

8. Ross, A. M.: Polyethylene Emboli: How Many More? *Chest.* 57:307-308, 1970.

9. Taylor, F. W., and Rutherford, C. E.: Accidental Loss of Plastic Tube into the Venous System. *Arch. Surg.* 86:177-179, 1963.

10. Ayers, W. B.: Fatal Intracardiac Embolization from Indwelling Intravenous Polyethylene Catheter. *Arch. Surg.* 75:259-262, 1957.

11. Bernhardt, L. C., Wegner, G. D., and Mendenhall, J. T.: Intravenous Catheter Embolization to the Pulmonary Artery. *Chest.* 57:329-332, 1970.

12. Massumi, R. A., and Ross, A. M.: Atraumatic Non-Surgical Technique for Removal of Broken Catheters from Cardiac Cavities. *New Eng. J. Med.* 277:195-196, 1967.

13. Edestein, J.: Atraumatic Removal of a Polyethylene Catheter from the Superior Vena Cava. *Chest.* 57:381-383, 1970.

14. Soni, J., Osatinsky, M., Smith, T., Vega, S., and Vela, J. E.: Non-Surgical Removal of Polyethylene Catheter from Right Cardiac Cavities. *Chest.* 57:398-399, 1970.

15. Shander, D.: Removal of an Embolized Polyethylene Catheter Using a Ureteral Stone Catheter. *Chest.* 57:348-349, 1970.

16. Holder, T. M., and Crow, M. L.: Free Intracardiac Foreign Body. Complication of Ventriculovenous Shunt for Hydrocephalus. *J. Thorac. Cardiovasc. Surg.* 45:138-140, 1963.

17. Udwadia, T. A., and Edwards, A. E.: Accidental Loss of Plastic Tube into Venous System. *Brit. Med. J.* 2:125, 1965.

18. Coblentz, R.: Radiographic Selection of Plastic Catheter Embolus. *Calif. Med.* 105:357-360, 1966.

SPECIAL ARTICLES

Mercury Pollution—A Fish Story

J. Bradford Block, M.D.*

THE syndrome of methylmercury poisoning in man through the consumption of mercury contaminated fish has come to be known as "Minamata disease" because of its discovery in the villages surrounding Minamata Bay in Japan.[1] The clinical picture of the disease, first observed in 1953, includes paresthesias of the extremities, mouth and lips; concentric constriction of the visual fields which may progress to blindness; loss of hearing; ataxia; loss of coordination; reflex changes, including extensor plantar responses; and in more severe cases, loss of ability to speak and progressive intellectual deterioration.[2]

Two outbreaks have been identified in Japan: one in Minamata Bay and the other at Niigata. A total of 168 cases, with 52 deaths, were identified up to 1970.

The sources of mercury contamination in Minamata Bay and Niigata proved to be the discharges from industries using mercury catalysts in the manufacture of vinyl chloride and acetaldehyde. Methylmercury was identified in the discharge of these plants.[3]

Until recently, it was thought that all methyl and other alkylmercury compounds in the environment were man-made. In 1969, mercury was shown to be methylated by aquarium and natural sedements[4] and enzymatically by extracts of methanogenic bacteria.[5] All forms of mercury appear to be directly or indirectly capable of conversion to methylmercury.[6] Thus bodies of water contaminated by simple inorganic mercury act as a continuous source for the production of methylmercury.

Methylmercury is concentrated in fish approximately 5000 fold that in the surrounding water by entering through the gills during respiration or by ingestion of mercury absorbed on phytoplankton. Once bound to protein, the half life in fish has been estimated to be two to three years and the binding strength is such that it is not affected by freezing, boiling, or frying.[7]

Methylmercury predominates in fish even when other forms of mercury have been released. Methylmercury often comprises 95 per cent of the mercury in fish tissue. This is important for man, because of all the forms of mercury, methylmercury is the best absorbed and the most slowly lost. The available data indicates an intestinal absorption for methylmercury of more than 90 per cent.[8]

Methylmercury is excreted principally in the feces, with lesser amounts being excreted in the urine. Fecal excretion amounts to about three to four per cent for the first few days and then about one per cent per day. Only about one tenth per cent per day is lost in the urine.[9]

The biological half life of mercury in humans is 70 days for red blood cells, 50 to 83 days for plasma,[10] and 70 to 74 days as determined by total body measurement.[7]

Methylmercury can cross the blood-brain barrier more easily than can other forms of mercury. In fatal cases of "Minamata disease," the ratio of methylmercury in the brain was on

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the order of about five to one for the level in the liver or kidney.[11] This is in contrast to levels about 25 times more in the liver and kidney than in the brain for inorganic mercury. Levels of methylmercury in brain tissues of persons dying of "Minamata disease" have ranged from three to 48 μg/g of brain tissue.[8] It has been shown that, preferentially, cells in the calcarine and precentral regions of the cerebrum and in the granular layer of the cerebellum are involved.[8, 11]

Methylmercury crosses the placental barrier and even achieves a 30 per cent higher concentration in fetal red blood cells than in maternal red blood cells.[12] Of the 359 children born near Minamata Bay, 23 were affected with a cerebal palsy-like disease.[11, 13] The disease was characterized clinically by mild to moderate spasticity and ataxia and in some cases, mental retardation and seizures. The affected children had not eaten mercury contaminated fish, their mothers were not clinically affected, and those that died showed high levels of mercury in the brain, liver, and kidney—approximating that found in the adult disease. Autopsied cases showed depletion of granular cells in the cerebellum and cerebral cortical damage.

Genetic mutations and chromosomal aberations have not been demonstrated in test mammals. However, high levels of methylmercury have produced teratogenic effects in test animals. A 31.6 per cent incidence of cleft palate was observed in offspring of rats administered a single high dose of methylmercury on day ten of pregnancy.[14] The significance of the reported statistical increase in chromosomal breaks in human lymphocytes following consumption of large amounts of mercury contaminated fish remains to be seen.[15]

It has been suggested that blood levels of mercury and levels of intake of mercury contaminated fish are directly related.[12] Individuals ingesting approximately 0.019 and 0.034 mg/day of methylmercury had whole blood levels of approximately 0.016 and 0.021 μg/g respectively. Thus, a reasonable estimate associates an intake of 0.3 mg/day, with a total blood level of 0.2 μg/g.[16] The lowest whole blood concentration at which symptoms have occurred is 0.2 μg/g.[17]

Therefore, based upon observed blood and brain levels of mercury in the most sensitive symptomatic cases, the half life and distribution characteristics of methylmercury, and the estimated intake of mercury in toxic cases, a Swedish panel of experts has recommended an intake of not more than 0.03 milligrams methylmercury per day for a 150 pound man.[18]

An average serving of fish, five to seven ounces (150-200 grams) with 1.0 ppm, would yield 0.15 to 0.20 milligrams methylmercury. To maintain an acceptable daily intake of 0.03 milligrams per day, such fish could be eaten only once a week. At 0.5 ppm (the interim guideline established by the U.S. Food and Drug Administration), only two meals per week could be eaten. For unrestricted consumption of fish, a level of 0.2 ppm would be the maximum permitted by this recommended standard (0.03 milligrams per day). Natural levels of mercury in fish have been thought to be as high as 0.2 ppm.

The neurologic and neuropathologic findings in clinical cases strongly suggest that brain damage largely has been accomplished by the time the diagnosis is made; and although chelating agents increase the rate of excretion of mercury in urine, their administration has been clinically ineffective.

Therefore, since there is no effective therapy for overt methylmercury poisoning, prevention is the means of control to be emphasized.

Even if all the sources of mercury pollution were reduced to zero, the contamination of fish with mercury would continue. Levels of

mercury now present in bottom mud are sufficient to result in the continued contamination of fish for some years to come.

Much new knowledge must be gained before a safe level of exposure can be confidently set. The major difficulty is the uncertainty of level that might cause chromosomal or fetal damage. The long-range effects of low levels of intake over extended periods of time are not clear. New information may well alter what is ultimately considered an acceptable daily intake.

In the meantime, the interim U.S. Food and Drug Administration guideline of 0.5 ppm in fish and the Swedish "Allowable daily intake" of 0.03 mg/70Kg seem to provide a sound basis for the protection of the public health.

References

1. Goldwater, L. J.: Mercury in the Environment. *Scientific American,* Vol. 224, No. 5, pp. 15-21, 1971.
2. Kutsuma, M.: Historical perspective of the study on Minamata disease, Minamata Disease. Study Group of Minamata Disease, Kumamoto University, Japan, pp. 1-4, 1968.
3. Irukayama, K., Kai, F., Fujiki, M., et al: Industrial wastes containing mercury compounds from Minamata factory. *Kumamoto Med. J.* 15: 57-68, 1962.
4. Jensen, S., and Jernelov, A.: Biological methylation of mercury in aquatic organisms. *Nature* 223: 753-754, London, 1969.
5. Wood, J. M., Kennedy, F.S., and Rosen, C. G.: Synthesis of methylmercury compounds by extracts of a methanogenic bacterium. *Nature* 220: 173-174, London, 1968.
6. Jernelov, A.: "Chemical Fallout," p. 72, Thomas, Springfield, Ill., 1969.
7. Miettinen, J. K., Tillander, M., Rissanen, K., et al: Distribution and excretion rate of phenyl and methylmercury nitrate in fish, mussels, molluses, and crayfish. *Proc. Jap. Conf. Radioisotop,* 9th, pp. 474-478, 1969.
8. Berglund, F., and Berlin, M.: Risk of methylmercury cumulation in men and mammals and the relation between body burden of methylmercury and toxic effects. "Chemical Fallout," pp. 258-273, Thomas, Springfield, Ill., 1969.
9. Falk, R., Snihs, J. O., Ekman, D., et al: Wholebody measurements on the distribution of mercury 203 in humans after oral intake of methylradiomercury nitrate. *Acta Radiol.* 9: 55, 1970.
10. Tejning, S.: Mercury content in the blood system, blood plasma and in heavy fish eaters from different regions and the connections between mercury content in fish together with a proposal on international food hygienic limits on mercury applicable to fish and fish products. Report 670731, Clinic of Occupational Medicine, Univ. Hosp., Lund, Sweden, 1967.
11. Takeuchi, T.: Pathology of Minamata disease, Minamata Disease. Study Group of Minamata Disease, Kumamato University, Japan, pp. 141-252, 1968.
12. Tejning, S.: No fish for mother. *Scnd. Times* 4: 24-25, 1970.
13. Harada, Y.: Congenital Minamata disease, Minamata disease. Study Group of Minamata disease, Kumamoto University, Japan. pp. 93-117, 1968.
14. Oharazawa, H.: Effect of ethyl mercuric phosphate in the pregnant mouse on chromosome abnormalities and fetal malformation. *S. Jap. Obstet. Gynecol. Soc.* 29: 14-79, 1968.
15. Skerfving, S., Hansson, K., and Lindsten, J.: Chromosome breakage in humans exposed to methylmercury through fish consumption. *Arch. Environ Health* 21: 133-139, 1970.
16. Skerfving, S., Berlin, M., Clarkson, T. W., et al: Maximum allowable concentrations of mercury compounds. *Rep. Int. Comm. Arch. Environ. Health* 19: 891-905.
17. Tsubaki, T., Sato, T., Kondo, K., et al: Outbreak of intoxication by organic mercury compound in Niigata Prefective. *Jap. J. Med.* 6: 132-133.
18. The Swedish Commission on Evaluating the Toxicity of Mercury in Fish. "Metylkvick silver I fisk," 1970.



A Significant Step

PERHAPS the single most important action at the KMA House of Delegates meeting this year was one which seemed to generate little open discussion at the time it was voted upon. The lack of controversy is all the more interesting in view of the fact that this action harbors significant potential for change, change in the patterns of practice of all of us who are physician-members of KMA. The tranquil acceptance of this well-publicized issue would seem to indicate 1) it is an idea "whose time had come," and 2) it was extremely well-organized and presented. Both conclusions, in the view of this writer at least, are correct.

The action, of course, as you've probably guessed by now, was the authorization given by the Delegates to the Board of Trustees to form a Foundation, in the name of KMA. Such a Foundation will be able to act for us in dealing with large groups which are seeking to obtain, or to provide payment for, health care. It can act as our economic arm, dealing with the nitty-gritty of cash flow, in a way that none of us individually, nor KMA organizationally, is able to do. KMA doesn't have the extra staff nor the authorization-by-charter to handle such funds, and individually we have neither the right nor the ability to represent a group of fellow-doctors in such matters.

What will the Foundation do? I believe it's fair to say that no one really knows the specifics at this stage. Much depends, of course, on the unpredictable legislative output of both State and Federal governments. By enlisting the majority of Kentucky physicians as members, though, the Foundation would be in a position to offer a "peer-reviewed," high quality, but cost-conscious, brand of health care to very large groups of patients—and such patient-groups could be represented by private insurance companies, industrial groups, or State or Federal governments. In return, the Foundation would reserve to itself and to its voting members (us) the right to negotiate equitable financial input for such care, and then would authorize output (for services) as it saw fit. It's no secret that fee-for-service would be the method of choice for payment to physicians under such a plan. It's also no secret that, given a finite financial input, and a potentially infinite financial output, the art of peer-review would necessarily be raised to new levels of efficiency.

In a time when groups of all sorts can organize to produce political and economic pressures beyond any individual's capacity to resist, it would seem that the prudent course, to protect our patients' health and our own well-being, involves our joining together in this form of medical leadership.

More than any other man, Doctor Henry Asman—who by the by is Associate-Editor of this Journal—has seen the need for KMA to form such a Foundation and assume such leadership. Whatever the ultimate outcome of the Foundation concept, it is to Doctor Asman and his Medical Economics Committee that credit is due for the clarity of its original presentation, and the ease of its adoption.

WALTER I. HUME, JR., M.D.

ORGANIZATION SECTION

House of Delegates Elects Drs. Hess and Robie

Lee C. Hess, M.D., Florence, was chosen President-Elect for the Associational year of 1971-72 by the KMA House of Delegates.



Dr. Hess

Also elected at the September 22 session was Carroll H. Robie, M.D., Louisville, who is the Association's new Vice-President.

John S. Harter, M.D., Louisville, was installed as KMA President at the President's Luncheon. He succeeds John C. Quertermous, M.D., Murray.

Doctor Hess, a member of the KMA Board of Trustees since 1966, was Chairman in the Associational years of 1968-69 and 1970-71. He is a member of the Kentucky and American Academies of Family Physicians and is former Treasurer of the Boone County Medical Society.

Doctor Robie, Assistant Clinical Professor of Medicine at the University of Louisville School of Medicine, is Chairman of the Grievance Committee, Jefferson County Medical Society. He is a member of the Governor's Advisory Council for Health Facilities and Past-President of the Louisville Society of Internists.



Dr. Robie

Newly elected as AMA Delegates are John C. Quertermous, M.D., Murray, and David B. Stevens, M.D., Lexington; new Alternate Delegates are Fred C. Rainey, M.D., Elizabethtown, and W. Donald Janney, M.D., Covington.

Dr. Hull Elected Board Chairman; Vice-Chairman Is Dr. McLeod

David A. Hull, M.D., Lexington, was elected Chairman of the KMA Board of Trustees at its first meeting of the Associational year, September 23. Robert N. McLeod, Jr., M.D., Somerset, was re-elected Vice-Chairman of the Board.

Doctor Hull succeeds Lee C. Hess, M.D., Florence.

A general and vascular surgeon and an Associate Clinical Professor of Surgery at the University of Kentucky Medical Center, Doctor Hull served KMA as Vice-President in 1969-70. He was elected to the Board of Trustees in 1970. He is also President of the Lexington Surgical Society.



Dr. Hull



Dr. McLeod

Doctor McLeod, a pediatrician, has been on the Board of Trustees since 1968. He is serving KMA as Chairman of the Committee on School Health, Physical Education and Medical Aspects of Sports and as a member of the Advisory Committee to Blue Cross and the Committee on Plans and Development and the Ad Hoc Committee on Health Manpower. He is a Past-President of the Pulaski County Medical Society and the Kentucky Pediatric Society.

Newly elected members of the Board are: W. Eugene Sloan, M.D., Paducah, First District, succeeding C. C. Lowry, M.D., Murray, and Ralph L. Cash, M.D., Princeton, Third District, succeeding Thornton E. Bryan, Jr., M.D., Cadiz. Carl J. Brueggemann, M.D., Covington, was elected to a one-year term as Trustee of the Eighth District.

W. Bruce Hamilton, M.D., Shepherdsville, was re-elected to a three-year term as Fourth District Trustee; Doctor McLeod was re-elected to a three-year term as Twelfth District Trustee; and Ballard W. Cassady, M.D., Pikeville, was re-elected as Trustee from the Fourteenth District.

Newly-elected Alternate Trustees are: Keith E. Ellis, M.D., Benton, First District; Edwin R. Davis, M.D., Hopkinsville, Third District; Jerry D. Fraim, M.D., Paintsville, Fourteenth District. Robert C. Smith, M.D., Newport, was elected to fill the one-year unexpired term as Alternate Trustee for the Eighth District.

Re-elected for three-year terms as Alternate Trustees were: Emmett W. Wood, M.D., Bardstown, Fourth District, and Paul J. Sides, M.D., Lancaster, Twelfth District.

KEMPAC Physicians, Guests Hear Gubernatorial Candidates

An overflow crowd of 287 physicians and guests heard Kentucky's gubernatorial candidates, Thomas D. Emberton (R) and Lieutenant Governor Wendell H. Ford (D), speak at the Ninth Annual KEMPAC Seminar held September 20 at the Executive Inn, Louisville. C. Kenneth Peters, M.D., Jeffersontown, KEMPAC Chairman, presided.

Julian M. Carroll (D) and W. James Host (R), candidates for Lieutenant Governor of Kentucky, were among other guests present.

The theme for the evening was, "What Medicine Expects from State Government and What State Government Expects from Medicine."

Mr. Emberton told of his plan for a "total, all-out assault on our drug abuse problem." His program, as planned, will include a tightening of laws against drug pushers and immunity for drug users asking for treatment.

Lieutenant Governor Ford told of his plans for having a licensure board, made up of physicians, separate from the Kentucky Department of Health. He also called for a renewed emphasis on state services for preventive medicine, as well as for curative services.

Auxiliary Installs Mrs. Stevens, Elects Mrs. Schafer

Mrs. David Stevens, Lexington, was installed as President of the Woman's Auxiliary to KMA during its Annual Convention September 20-22 in Louisville. Mrs. George Schafer, Louisville, was chosen President-Elect. Mrs. Stevens succeeds Mrs. Charles Hornaday, Owensboro, who presided at the meeting.

Newly elected to Fourth Vice-President of the Auxiliary is Mrs. Lee Hess, Florence, succeeding Mrs. James Ferrell, Paris. Re-elected as Vice-Presidents are: Mrs. Kenneth Peters, Louisville, First Vice-President; Mrs. Edwin T. Davis, Paducah, Second Vice-President; and Mrs. Ben Crawford, Lexington, Third Vice-President.

Other newly elected officers are Mrs. Gordon Hyde, Lexington, Corresponding Secretary, and Mrs. Raymond Jones, Louisville, Parliamentarian. Re-elected are: Mrs. James Gulley, Madisonville, Recording Secretary, and Mrs. Leslie Langley, Jr., Elizabethtown, Treasurer.

1972 KMA Interim Meeting Is Set For April 13-14

The 1972 KMA Interim Meeting will be held April 13-14 at the Holiday Inn, Somerset, Kentucky. The KMA Interim Meeting Committee will meet this month to finalize plans for the program.

Continuing the policy set last year, afternoons will be left open for recreational activities.

The Woman's Auxiliary to KMA, as usual, plans a meeting in conjunction with the Interim Meeting.



KMA Awards Committee Chairman, Douglas E. Scott, M.D., Lexington, (center right) is pictured congratulating the recipients of KMA's three top awards for 1971. Robert E. Pennington, M.D., London, (left) received the Distinguished Service Award; Judge Robert O. Miller, Murray, (left center) was given the Kentucky Medical Association Award; and H. Burl Mack, M.D., (right) received the Outstanding General Practitioner Award.

Two Physicians, Judge Miller Receive KMA's Top Awards

KMA's three top awards went this year to Robert E. Pennington, M.D., London; H. Burl Mack, M.D., Peewee Valley; and Judge Robert O. Miller, Murray. The presentations were made September 23 at the President's Luncheon by Douglas E. Scott, M.D., Lexington, Chairman of the Awards Committee.

The Distinguished Service Award, presented annually to the physician selected as the most outstanding member of the Kentucky Medical Association, was presented to Robert E. Pennington, M.D. Doctor Pennington, a surgeon, has served KMA as Chairman of the Board of Trustees in 1964-65 and as President in 1966-67. He is also a Past-President of the Laurel County Medical Society and a charter member of Kentucky's Comprehensive Health Planning Council. He is a member of the Advisory Council on Health for the Appalachian Regional Commission.

H. Burl Mack, M.D., Peewee Valley, received the Outstanding General Practitioner Award. Doctor Mack has practiced family medicine since 1939, with a special interest in geriatrics and psychiatry. He has been Chairman of the Oldham County Board of Health for the past 20 years and was instrumental in the establishment of the Peewee Valley Rural Sanitarium and the Therapeutic Nursing Home.

The Kentucky Medical Association Award was presented to Judge Robert O. Miller, Murray. This award has been given annually since 1958 to a layman for outstanding accomplishments in the field of health or medical care. Chairman of the Calloway Board of Health, Judge Miller is a member of the State Comprehensive Health Planning Council and Chairman of its Task Force on Health Manpower.

Faculty Awards Presented To Drs. Zechman And Andrews

Fred W. Zechman, Jr., Ph.D., and Billy F. Andrews, M.D., were presented the 1971 KMA Faculty Scientific Awards at the Annual Meeting President's Luncheon, September 22.

Established in 1962 by the KMA Committee on Medical Education, the Faculty Scientific Awards are presented each year to a faculty member of each of the two medical schools in Kentucky. The recipient must have done outstanding research or have made a considerable contribution to the field of medicine.

Doctor Zechman is Chairman of the Department of Physiology and Biophysics at the University of Kentucky College of Medicine. He has done research concerning acceleration on pulmonary function and with pulmonary mechanics under varying stresses.

Doctor Andrews is Chairman, Department of Pediatrics, University of Louisville School of Medicine. He has developed a number of significant programs in the areas of neonatology and problems of the high risk infant.

Nominating Committee Elected By House Of Delegates

The Nominating Committee members were elected by the KMA House of Delegates at its final session September 22. This committee is entrusted with the responsibility of presenting to the House of Delegates, at its final session of the 1972 Annual Meeting, a slate of candidates for all elective offices within the structure of the Kentucky Medical Association.

The committee members chosen were: Coy E. Ball, M.D., Owensboro; Harold L. Bushey, M.D., Barbourville; Thomas L. Heavern, Jr., M.D., Highland Heights; Robert L. McClendon, M.D., Louisville; and Nelson B. Rue, M.D., Bowling Green. The committee will select a chairman at its first meeting during the Interim Meeting, April 13-14, at Somerset.



During a brief break in activities at the 1971 Annual Meeting, John C. Quertermous, M.D., Murray, 1970-71 KMA President, (left) reviews with Executive Director of KMA, Robert G. Cox, some of the events which took place during Doctor Quertermous' term in office.

Dr. Musgrave, U. S. Astronaut, Speaks At Luncheon

Story Musgrave, M.D., U. S. astronaut, addressed 334 physicians and guests at the Presidents Luncheon, September 22, on "United States' Spaceflight Objectives, 1971-2000."

Doctor Musgrave gave the audience a forecast of how the United States plans to use the knowledge and experience gained from our space program. He stated that there will be two more trips to the moon by U.S. astronauts. Then NASA will "turn its efforts to earth. We will find practical use for spaceflights in the future."

Included in the "earth resources program" will be the exploration for minerals and the study of the sun as our source of energy. Doctor Musgrave predicts that future spaceflights will, among other things, increase our ability to communicate, navigate, and forecast weather.

Other features of the President's Luncheon were the presentation of awards and the installation of KMA's President, John S. Harter, M.D., Louisville.

COMPARATIVE REGISTRATION FIGURES

KMA Annual Meetings

	Louisville 1962	Lexington 1963	Louisville 1964	Louisville 1965	Louisville 1966	Louisville 1967	Louisville 1968	Louisville 1969	Louisville 1970	Louisville 1971
KMA Members	1014	865	924	1172	1016	957	1009	1056	1013	1186
Guest Physicians	208	141	157	138	195	152	153	149	130	149
Interns-Residents	102	69	108	132	121	94	103	95	101	70
Medical Students	176	59	128	193	209	222	185	218	245	233
Registered Nurses	59	31	34	27	33	24	42	27	48	30
Exhibitors	232	212	297	297	312	272	256	305	280	269
Guests	123	132	125	172	126	115	324	339	379	356
Technicians— Office Assistants	71	22	61	55	46	31	29	39	32	36
TOTAL ATTENDANCE	1985	1531	1844	2186	2058	1867	2111	2228	2228	2329



President-Elect Lee C. Hess, M.D., Florence, (center) is escorted to the speakers platform by Past-Presidents Henry B. Asman, M.D., Louisville, (left) and Robert E. Pennington, M.D., London.



A special resolution is presented to James B. Holloway, M.D., Lexington, (right above) by Lee C. Hess, M.D., Florence, President-Elect, for outstanding service during more than a decade as Chairman of the KMA Hospital Committee.



As his first official act after assuming the Presidency of KMA, John S. Harter, M.D., Louisville, presents a plaque to John C. Quertermous, M.D., Murray, Outgoing President, (left) for Distinguished Service during his term as President.



Story Musgrave, M.D., Houston, Texas, addresses a record crowd at the 1971 President's Luncheon, September 22. Doctor Musgrave spoke on "United States' Spaceflight Objectives, 1971-2000."



John M. Baird, M.D., Danville, Chairman of the 1971 Nominating Committee, is shown at left above reporting to the Wednesday night session of the House of Delegates.



John S. Harter, M.D., Louisville, KMA President, (left center) congratulates Lee C. Hess, M.D., Florence, (right center) on his election to President-Elect of KMA. Treasurer of KMA, Keith P. Smith, M.D., Corbin, (left) and S. Randolph Scheen, M.D., Louisville, KMA Secretary, (right) look on. Dr. Hess was elected during the second session of the House of Delegates, September 22.



Speaker of the House of Delegates, Richard F. Greathouse, M.D., Louisville, (at upper podium) calls the second session of the House of Delegates to order, as Reference Committee Chairmen (at lower level) prepare to make their final reports. The House, KMA's top policy-making body, met September 20 and 22 during the Annual Meeting.



Shown attending the 1971 KEMPAC Seminar are: (from left to right) Hoyt D. Gardner, M.D., Chairman of AMPAC; Thomas D. Emberton. Republican gubernatorial candidate; C. Kenneth Peters, M.D., KEMPAC Chairman; John C.. Quertermous, M.D., 1970-71 President of KMA; and Lieutenant Governor Wendell H. Ford, Democratic gubernatorial candidate. Mr. Emberton and Lieutenant Governor Ford addressed the record-breaking crowd attending the Seminar on, "What Medicine Expects from State Government and What State Government Expects from Medicine."

Kentucky Foundation And Licensure Board Are Considered As KMA House Acts On 48 Reports And 19 Resolutions

The Kentucky Medical Association's House of Delegates reviewed and took action on 48 committee reports and 19 resolutions submitted to them at this year's Annual Meeting, September 21-23.

A major order of business was the establishment of the Kentucky Foundation for Medical Care. The Foundation, a separate, non-profit, tax exempt corporation, will have an interlocking directorate with the Association to assure its continued control by KMA. It will be governed by its own set of bylaws and its primary purpose will be to engage in such activities as may be necessary to maintain KMA's position of leadership in health matters in Kentucky.

The House approved a number of resolutions calling for changes in several of the Association's activities to include: supporting legislation which would bring the Medical Licensure Board under KMA and physically locate it at the KMA Headquarters Building; recommending that any health program from outside the state be approved by the Kentucky Medical Association and the State Comprehensive Health Planning Council before being implemented in Kentucky; calling on all third party carriers to bring about an equitable payment plan for all physicians in the state; discontinued the Outstanding General Practitioner Award; and adopted the American Medical Association's *Current Procedural Terminology*.

Due to a recommendation by the KMA Board of Trustees at last year's Annual Meeting, the House approved the necessary changes in KMA's Constitution and Bylaws regarding active members' dues during their first three years as members of the Association. They also approved changes in the bylaws allowing alternate trustees to become voting members of the House and added a new subsection to be known as in-training member to permit voting privileges to interns and residents.

For the coming Associational year, the House approved recommendations of the Plans and Development Committee calling for: the Legislative Committee to work towards securing amendments to the medical practice act; increased study be given the feasibility of establishing educational equivalency measures and job performance tests as alternative routes to advanced educational placement, licensure or certification of health personnel; and encouragement to programs for periodically updating the knowledge and skills of currently licensed or certified occupations, utilizing such methods as continuing education courses, self-assessment tests and review mechanisms.

A resolution introduced by the Committee on Community and Rural Health was also approved. The resolution calls on KMA to do everything in its power to lead the fight against drug abuse in Kentucky and asked that every county medical society in the state establish a Drug Abuse Committee to help in this fight.

The House commended the Judicial Council for its dedication to its duties and for its courage in taking proper disciplinary actions against fellow members. Due to the increasing volume of work it will be necessary for the Council to meet on a monthly basis.

This is only a brief summary of the more important points covered at this year's meeting. All of the reports and resolutions acted on by the KMA House of Delegates will be published in the December issue of *The Journal*.

Annual Meeting Receives Praise From Guests And Speakers

"Thank you for a delightful two days that we had in Louisville at the 121st annual convention of the Kentucky Medical Association. I thought your scientific and technical exhibits were outstanding in the year when they are diminishing throughout the rest of the country."

Malcolm O. Scamahorn, M.D.
President
Indiana State Medical Association
Indianapolis, Indiana

"Thank you for your letter of September 28, in which you informed me of the resolution of the Kentucky Medical Association in my behalf. I deeply appreciate this honor and would like for you to express my gratitude to the officers and members of the Association. It was a pleasure participating in your recent meeting, and I am grateful for the warm reception and gracious hospitality shown me during my visit to Louisville."

Michael E. DeBakey, M.D.
President
Baylor College of Medicine
Houston, Texas

"It was a real pleasure for me to have the opportunity of meeting you and having the privilege of being your guest at the KMA meetings in Louisville. I enjoyed the visit very much and appreciate the gracious hospitality which you and your colleagues extended to me."

Max D. Cooper, M.D.
Professor
University of Alabama in Birmingham
Birmingham, Alabama

Henry B. Asman, M.D., Louisville, recently became Medical Consultant to the Medicare Division of Blue Cross Hospital Plan, Inc. Doctor Asman's duties are to serve as consultant in matters pertaining to covered care and claims review. He also will be available to meet with provider representatives, medical staff, and utilization review committees.

Dr. Rudolf Noer To Deliver Annual Yandell Lecture

Rudolf J. Noer, M.D., Emeritus Professor of Surgery at the University of Louisville and currently Professor of Surgery at the University of South Florida School of Medicine, will deliver the 19th Annual David W. Yandell Lecture at 11:00 a.m., Monday, November 22, in the Health Sciences Center Auditorium.

Doctor Noer will speak on "Patterns of Change in Medical Education." He will also be guest speaker at the annual dinner of the Louisville Surgical Society on November 23 and will take part in conferences and seminars at the School of Medicine during his stay. Doctor Noer is Chairman of the Board of Governors of the American College of Surgeons and has served the College on its Committee on Medical Education. In addition, he is presently involved in developing innovations in medical school curriculum as related to contemporary requirements for delivery of health care.

Sponsored by the Louisville Surgical Society and the Department of Surgery of the University of Louisville, the Yandell Lectureship is held each year in honor of the late David W. Yandell, M.D., founder of the Louisville Surgical Society and a Past-President of the American Medical Association, as well as past Professor and Chairman of the Department of Surgery at the University of Louisville. All physicians and medical students are invited to attend the lecture and conferences.

Eleven Kentucky Physicians Awarded ACS Fellowships

Eleven Kentucky physicians were among the 1,475 surgeons inducted as new Fellows of the American College of Surgeons during the Annual Clinical Congress of the group held last month.

Fellowship, a degree entitling the recipient to the designation "F.A.C.S." following his name, is awarded to those surgeons who fulfill comprehensive requirements of acceptable medical education and advanced training as specialists in one of the branches of surgery, and who give evidence of good moral character and ethical practice.

The Kentucky physicians awarded ACS Fellowships are: Frank H. Catron, M.D., Corbin; Lt. Col. Darryl H. Powell, MC USA, Fort Campbell; Lt. Col. William L. Bacon, MC USA, Fort Knox; Augustin Sierra, M.D., Henderson; Robert P. Belin, M.D., H. Martin Blacker, M.D., Allen E. Grimes, Jr., M.D., all of Lexington; Clifford L. Berner, M.D., Louisville; C. William Jansing, M.D., Owensboro; James C. Seabury, Jr., M.D., Paducah; and Veryl F. Frye, M.D., Somerset.

92 Physicians Attend Twelfth KMA Orientation Program

Ninety-two physicians attended the Twelfth Orientation Program for new KMA members on September 20, according to Wyatt Norvell, M.D., New Castle, Chairman of the Committee on Orientation.

The Orientation Program, held during the Annual Meeting, is designed to better equip new KMA members in meeting present-day responsibilities as a citizen and as a physician.

Listed below are the names of the physicians who attended the September 20 session. If you were present and your name is not listed, please notify the KMA Headquarters Office.

Corazon B. Acosta, M.D., Barbourville
Rogelio A. Acosta, M.D., Barbourville
Merritt O. Alcorn, M.D., Louisville
Billy R. Allen, M.D., Beaver Dam
Paul J. Arena, M.D., Louisville
Juan S. Asuncion, M.D., Louisville
Erdogan Atasoy, M.D., Louisville
Harry L. Bailey, M.D., Lexington
R. Quin Bailey, M.D., Danville
David L. Barrett, M.D., Murray
George H. Batchelor, M.D., Glasgow
Abram S. Beneson, M.D., Lexington
Romeo S. Berardi, M.D., Lexington
Ben M. Birkhead, M.D., Louisville
David H. Bizot, M.D., Louisville
Donald E. Blair, M.D., Morehead
Gene D. Bowling, M.D., Hyden
Burns M. Brady, M.D., Louisville
Susan J. H. Brenner, M.D., McDowell
Philip C. Brooks, M.D., Hopkinsville
Thomas P. Buckley, M.D., Corbin
James R. Burt, M.D., Bowling Green
David B. Clark, M.D., Lexington
Thomas F. Coats, M.D., Lexington
Ronald N. Collier, M.D., Louisville
Joe G. Conley, M.D., Louisville
Jerry W. Conners, M.D., Bellevue
Phyllis D. Corbitt, M.D., Wilmore
L. B. Craycraft, M.D., Ashland
Stanley J. Cyran, M.D., Louisville
Lincoln M. de Sousa, M.D., Harlan
Mehmet A. Donmezer, M.D., Williamson, W. Va.
David W. Dorman, M.D., Louisville
Richard W. Dowdell, M.D., Louisville
Victor F. Duvall, M.D., Clarkson
Rachel Eubank, M.D., Harlan
Ronald E. Falls, M.D., Louisville
James W. Frazier, M.D., Hopkinsville
Carl Friedericks, M.D., Somerset
J. Terry Fuqua, M.D., Hopkinsville
Ronald G. Goebel, M.D., Louisville
Robert R. Goodin, M.D., Louisville
Allen E. Grimes, Jr., M.D., Lexington
Otto Haiderer, M.D., Louisville
Mary A. Hall, M.D., McDowell
John A. Halpin, M.D., Midway
Michael T. Hamilton, M.D., Louisville
Ira L. Hemmings, Jr., M.D., Lexington
Carl Henry, M.D., Owensboro
B. Glenn Hicks, M.D., Lancaster
M. Charlene Hill, M.D., Mayfield
Ernest C. Holbrook, M.D., Prestonsburg
J. W. Hollingsworth, M.D., Lexington
Ronald F. Howard, M.D., Hopkinsville
William E. Jackson, M.D., Madisonville
C. William Jansing, M.D., Owensboro
Lawrence F. Jelsma, M.D., Louisville
Richard K. Jelsma, M.D., Louisville
Johan Jensen, M.D., Louisville
Carl W. Kesner, M.D., Berea
Hak L. Kim, M.D., Williamson, W. Va.
Jerry Edd King, M.D., Lexington
William E. Layden, M.D., Louisville
Joseph C. Marshall, Jr., M.D., Louisville
Charles E. Maurmeier, M.D., Cincinnati
James D. McNeely, M.D., Louisville
Lawrence R. Mudd, M.D., Louisville
Donald R. Neel, M.D., Owensboro
David S. Nightingale, M.D., Louisville
Richard F. Park, M.D., Corbin
Frank W. Randall, M.D., Lexington
James R. Reynolds, M.D., Lynch
Kenneth N. Richter, M.D., Lynch
John Ritter, M.D., Harlan
John H. Rogers, M.D., Louisville
J. Russell Ross, M.D., Murray
Charles R. Sachatello, M.D., Lexington
Truman D. Simmons, M.D., Harlan
Frank G. Simon, M.D., Louisville
John D. Simpson, M.D., Louisville
Dorothy Suyemoto, M.D., Ft. Thomas
Mario V. Ulfe, M.D., Louisville
Martha B. Ulfe, M.D., Louisville
Erlindo G. Valera, M.D., Pikeville
John R. Van Nagell, Jr., M.D., Lexington
Hugo Velasco, M.D., Louisville
Anne A. Wasson, M.D., Hyden
Larry S. Wiggington, M.D., Greenville
Thomas A. Woodward, M.D., Lexington
James A. Zalla, M.D., Florence
Manoochehr Zia-Borhan, M.D., Harlan
Rodger J. Zwemer, M.D., Louisville

Number Of Active Physicians In Kentucky Counties Who Are Members Of KMA And AMA October 15, 1971

The total number of active Kentucky Physicians who are members of KMA, as of October 15, is 2393. Sixty-eight counties have 100 per cent KMA membership and 36 counties have 100 per cent AMA membership.

The chart below contains membership figures for each county as supplied by the membership department. Figures do not include associate, emeritus and retired members, or members who have paid 1971 dues, but have since died or left the state.

COUNTIES	Active Physicians	MEMBERS KMA	AMA	COUNTIES	Active Physicians	MEMBERS KMA	AMA	COUNTIES	Active Physicians	MEMBERS KMA	AMA
Adair	7	6	6	Graves(*)(**)	17	17	17	Menifee	0	0	0
Allen	5	4	4	Grayson	7	6	4	Mercer(*)	8	8	7
Anderson(*)	4	4	2	Green(*)	7	7	5	Metcalfe(*)	2	2	1
Ballard	3	2	2	Greenup(*)(**)	10	10	10	Monroe	7	6	6
Barren	20	19	18	Hancock(*)	3	3	1	Montgomery	10	8	6
Bath	3	2	1	Hardin	29	28	19	Morgan(*)	3	3	1
Bell	31	26	25	Harlan	46	41	41	Muhlenberg(*)(**)	13	13	13
Boone(*)	17	17	16	Harrison(*)	9	9	5	Nelson(*)(**)	8	8	8
Bourbon	12	11	3	Hart	6	4	4	Nicholas(*)	3	3	0
Boyd	53	50	42	Henderson	30	29	24	Ohio	7	6	1
Boyle	25	22	10	Henry(*)(**)	3	3	3	Oldham	8	7	6
Bracken(*)(**)	2	2	2	Hickman(*)	2	2	1	Owen(*)(**)	2	2	2
Breathitt(*)(**)	2	2	2	Hopkins	55	47	46	Owsley(*)	2	2	0
Breckinridge(*)(**)	5	5	5	Jackson(*)(**)	1	1	1	Pendleton(*)	3	3	0
Bullitt(*)	6	6	5	Jefferson	830	802	603	Perry	18	17	13
Butler(*)(**)	2	2	2	Jessamine(*)(**)	3	3	3	Pike	43	31	28
Caldwell	6	5	5	Johnson	8	7	7	Powell(*)(**)	2	2	2
Calloway	20	19	16	Kenton—See Campbell				Pulaski(*)	29	29	24
Campbell-Kenton	154	146	104	Knott (*) (**)	2	2	2	Robertson	0	0	0
Carlisle(*)(**)	2	2	2	Knox	11	10	5	Rockcastle	2	1	0
Carroll(*)	5	5	3	Larue(*)	3	3	1	Rowan	13	11	10
Carter	2	1	1	Laurel(*)(**)	9	9	9	Russell(*)(**)	3	3	3
Casey(*)(**)	5	5	5	Lawrence(*)(**)	10	10	10	Scott(*)	7	7	2
Christian	42	37	36	Lee(*)(**)	1	1	1	Shelby(*)	8	8	6
Clark(*)	13	13	9	Leslie	4	3	3	Simpson(*)	5	5	2
Clay(*)(**)	5	5	5	Letcher	13	11	11	Spencer(*)(**)	2	2	2
Clinton(*)(**)	2	2	2	Lewis	2	1	1	Taylor(*)	5	5	4
Crittenden(*)(**)	1	1	1	Lincoln(*)(**)	3	3	3	Todd(*)(**)	3	3	3
Cumberland(*)(**)	2	2	2	Livingston	4	1	0	Trigg(*)(**)	4	4	4
Daviess	68	65	56	Logan	11	10	7	Trimble(*)(**)	1	1	1
Edmonson	2	1	1	Lyon(*)	3	3	2	Union	5	3	3
Elliott(*)(**)	2	2	2	McCracken	70	63	60	Warren	52	50	37
Estill(*)	3	3	1	McCreary(*)(**)	2	2	2	Washington(*)	4	4	3
Fayette	375	330	269	McLean(*)	4	4	0	Wayne(*)	6	6	4
Fleming(*)	3	3	0	Madison	24	23	14	Webster	3	2	2
Floyd	15	11	7	Magoffin(*)	3	3	2	Whitley	19	18	16
Franklin	35	34	21	Marion(*)	7	7	5	Wolfe(*)(**)	1	1	1
Fulton(*)(**)	8	8	8	Marshall(*)	9	9	8	Woodford(*)	8	8	2
Gallatin(*)(**)	1	1	1	Martin(*)(**)	2	2	2				
Garrard(*)	3	3	2	Mason	12	11	10	Totals	2573	2393	1884
Grant(*)(**)	4	4	4	Meade	4	3	1				

(*) 100% KMA (**) 100% AMA

ACC Awards Fellowships

Franklin G. Hoffman, M.D., and Kareem B. Minhas, M.D., both of Louisville, were recently granted Fellowships in the American College of Cardiology, the national medical society for specialists in cardiovascular diseases. They are among a group of 105 physicians from the United States and Canada recently admitted to the College's highest membership classification, according to Robert N. Class, M.D., Lexington, the ACC Governor for Kentucky.

Norton Seminar Planned

The 14th Annual Postgraduate Medical Seminar, co-sponsored by Norton Memorial Infirmary and the Kentucky Chapter, American Academy of Family Physicians, will be held December 16 at Norton Infirmary, Louisville. The program entitled, "Practical Approach to Commonly Encountered Gastrointestinal Problems," will begin at 10 a.m.

The guest speakers will be William Olsen, M.D., Department of Surgery, University of Michigan, and E. I. Winkelman, M.D., Department of Gastroenterology, Cleveland Clinic.

Five hours of AAFP credit have been applied for.

J. Ed McConnell, President of the Kentucky Blue Cross and Blue Shield, recently announced that Duane Harper, G. Douglas Sutherland, and Rondall Thornton, all of Louisville, have been elected Second Vice-Presidents of the company.

WANTED

GENERAL PRACTITIONER to share office with well established surgeon who owns office building in progressive town in Central Kentucky. Drawing population 72,000; modern hospital, all facilities; fine schools. Only ten general practitioners here; need is great. Write to Box 100, KMA Office, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205.

91 Kentucky Physicians Named To Am. Board Of Family Practice

Ninety-one Kentucky physicians are charter Diplomates of the American Board of Family Practice, the Board recently announced.

They are former general practitioners who have passed examinations in internal medicine, surgery, pediatrics, psychiatry, and other specialities.

Kentucky was the highest state in the country in the percentage of physicians who successfully passed the examinations.

The following is a list of the Kentucky physicians listed by the ABFP as being charter Diplomates of the Board.

Richard A. Allnutt, M.D., Covington
John W. Ambach, M.D., Louisville
Erwin Asriel, M.D., Paris
John M. Baird, M.D., Danville
Ted D. Ballard, M.D., Lexington
George C. Barber, M.D., Morehead
Donald C. Barton, M.D., Corbin
John C. Bates, M.D., Elizabethtown
Robert L. Beanblossom, M.D., Valley Station
Philip J. Begley, M.D., Harlan
Wallas N. Bell, M.D., Sturgis
Herbert R. Booth, M.D., Florence
Ralph E. Bowling, M.D., Richmond
Clyde M. Brassfield, M.D., Elizabethtown
Robert K. Brown, M.D., Georgetown
Thornton E. Bryan, Jr., M.D., Cadiz
Charles G. Bryant, M.D., Louisville
Winston L. Burke, M.D., Lexington
Robert C. Burkhart, M.D., Lexington
William K. Burkhart, M.D., Lexington
Woody G. Burrow, M.D., Paducah
Robert G. Callaway, M.D., Valley Station
Ralph L. Cash, M.D., Princeton
Henry F. Chambers, M.D., Campbellsville
Donald Chatham, M.D., Shelbyville
Robert B. Cloar, M.D., Lexington
Everett S. Coleman, M.D., Sacramento
Carlisle V. Dodson, M.D., Russellville
David D. Drye, M.D., Louisville
Kenneth M. Eblen, M.D., Henderson
James C. Embry, Jr., M.D., West Paducah
Ollie B. Emerine, M.D., Elizabethtown
James L. Ferrell, M.D., Paris
Norman S. Fisher, M.D., Midway
Harold F. Funke, M.D., Crestwood
Francis J. Halcomb, M.D., Scottsville
Harold D. Haller, Sr., M.D., Louisville
William B. Hamilton, M.D., Shepherdsville
Julian R. Hardaway, M.D., Danville
D. V. Hollingsworth, M.D., Georgetown
E. G. Houchin, M.D., La Grange
Jack C. Keeley, M.D., Owensboro
Stephen B. Kelley, M.D., Somerset
Wendell R. Kingsolver, M.D., Carlisle
James F. Kurfees, M.D., Crestwood
John H. Leland, M.D., Crestwood
David T. Lewis, M.D., Elizabethtown
Millard C. Loy, M.D., Columbia
Jerry W. Martin, M.D., Bowling Green
Lowell D. Martin, M.D., Martin
Gerald H. McCord, M.D., Hopkinsville
Harold S. Moberly, Jr., M.D., Winchester
Edgar B. Morgan, M.D., Louisville
Patrick J. Murphy, M.D., Lebanon Junction
Bradford E. Mutchler, M.D., Paducah
Earl P. Oliver, M.D., Scottsville
Elmer G. Prewitt, M.D., Corbin
Fred C. Rainey, M.D., Elizabethtown
James W. Ramey, M.D., Danville
Sam H. Reid, M.D., Danville
Benjamin F. Roach, M.D., Midway
James W. Roney, M.D., Lebanon Junction
Irvin S. Rosenbaum, M.D., Louisville
John G. Rulander, M.D., Louisville
John E. Ryan, M.D., Louisville
Robert J. Salisbury, M.D., Mt. Sterling
Robert P. Schiavone, M.D., Louisville
E. B. Schoenbachler, M.D., Jeffersontown
Frank D. Scutchfield, M.D., Morehead
E. C. Seeley, M.D., London
Charles B. Severs, M.D., Valley Station
Frank K. Sewell, M.D., Mt. Sterling
Charles J. Shipp, M.D., Greenville
Paul J. Sides, M.D., Lancaster
James G. Sills, M.D., Hardinsburg
Charles W. Sisk, M.D., Danville
William K. Skaggs, M.D., Taylorsville
Paul R. Smith, M.D., London
Charles B. Spalding, M.D., Bardstown
William P. VonderHaar, M.D., Louisville
Anne A. Wasson, M.D., Hyden
Max E. Wheeler, M.D., Ashland
Ralph E. Whitehead, M.D., Louisville
Robert H. Wilber, M.D., Lebanon
Arnold C. Williams, M.D., Lexington
Roy G. Wilson, M.D., Campbellsville
Paul A. Wolf, M.D., Louisville
Emmett W. Wood, M.D., Bardstown
William E. Yancey, M.D., Louisville
Martin Zukof, M.D., Louisville
Walter H. Zukof, M.D., Louisville

Survey On HMO Need Scheduled

The Pennyrile Medical Society has commissioned the Spindletop Research Foundation of Lexington to make a survey of the five counties the medical society serves to determine if a Health Maintenance Organization could be useful for the people of the area, James Cox, M.D., Hopkinsville, President of the Society, announced at a recent meeting.

Doctor Cox also announced the appointment of a committee of the medical society to work with Spindletop on this study. George F. Brockman, M.D., Greenville, was named Chairman; Faxon Payne, M.D., Hopkinsville, is Vice-Chairman. Other members of the committee are: Henry Bell, M.D., Elkton; Gary D. Givens, M.D., Central City; Frank Pitzer, M.D., and Charles R. Yancey, M.D., Hopkinsville; William N. Richardson, M.D., Cadiz; and Nathaniel H. Talley, M.D., Princeton.

Was Your Delegate Present?
ROLL CALL—

1971 House Of Delegates
KMA Annual Meeting

OFFICERS

		First Session	Second Session
Speaker	Richard F. Greathouse	Present	Present
Vice-Speaker	Carl Cooper, Jr.	Present	Present
President	John C. Quertermous	Present	Present
President-Elect	John S. Harter	Present	Present
Vice-President	Richard F. Grise	Present	Present
Secretary	S. Randolph Scheen	Present	Present
Treasurer	Keith P. Smith	Present	Present
Delegate to AMA	J. Thomas Giannini	Present	Present
Delegate to AMA	Charles C. Rutledge	Present	Present
Delegate to AMA	George Brockman	Present	Present
Alternate Delegate to the AMA	Charles G. Bryant	Present	Present
Alternate Delegate to the AMA	Daryl P. Harvey	Present	Present
Alternate Delegate to the AMA	David B. Stevens	Present	Present

TRUSTEES

District			
First (Alternate)	Carroll W. Traylor	Present	Present
Second	Charles C. Kissinger	Present	
Third	Thornton E. Bryan, Jr.		Present
Fourth	W. Bruce Hamilton	Present	Present
Fifth	John S. Llewellyn	Present	Present
Sixth	Paul J. Parks	Present	Present
Seventh	Thomas P. Leonard, Sr.	Present	Present
Eighth	Lee C. Hess	Present	Present
Ninth	J. Campbell Cantrill	Present	Present
Tenth	David A. Hull	Present	Present
Eleventh	Douglas H. Jenkins	Present	Present
Twelfth	Robert N. McLeod, Jr.	Present	Present
Thirteenth	J. Wesley Johnson	Present	Present
Fourteenth	Ballard W. Cassady	Present	Present
Fifteenth	E. C. Seeley	Present	Present

PAST PRESIDENTS

Past-President	Walter L. Cawood	Present	Present
Past-President	Henry B. Asman	Present	Present
Past-President	George Brockman	Present	Present
Past-President	Robert E. Pennington	Present	Present
Past-President	Delmas Clardy	Present	

DELEGATES

First District

		First Session	Second Session
BALLARD			
CALLOWAY	Donald Hughes	Present	Present
CARLISLE	J. T. O'Neill		
FULTON	G. F. Bushart		
GRAVES	C. Douglas Le Neave	Present	Present
HICKMAN	C. J. Mills		
LIVINGSTON			
McCRACKEN	C. M. Blanton (Alt.)	Present	
	Donald L. Boucher		
	W. Burton Haley	Present	Present
	Norman Parrott	Present	Present
MARSHALL	Keith Ellis	Present	Present

Second District

DAVIESS	Coy Ball	Present	Present
	John S. Oldham	Present	Present
	William E. Pearson	Present	Present
HANCOCK	B. P. Smith		
HENDERSON	Kenneth Eblen	Present	
	John McClellan	Present	
	Roy W. Montgomery (Alt.)		Present
McLEAN	Valentino Simpao		
OHIO	Robert E. Norsworthy		
	Charles L. Price (Alt.)		Present
UNION	Wallas N. Bell	Present	
WEBSTER			

Third District

CRITTENDEN	R. M. Brandon		
HOPKINS	Charles R. Fisher	Present	Present
	Kenneth P. Haywood	Present	Present
LYON	Robert H. Hyde		
PENNYRILE MULTI-COUNTY SOCIETY			
CALDWELL	Billy G. Jackson		
	N. H. Talley (Alt.)	Present	
	Henry R. Bell, Jr. (Alt.)		Present
CHRISTIAN	James B. Cox		
	Bennett L. Crowder (Alt.)	Present	Present
	W. Faxon Payne		
	Jere C. Robertson (Alt.)		Present
MUHLENBERG	Joseph R. Boggess		Present
	Joseph Stokes (Alt.)	Present	
TODD	Ralph Lynn	Present	
	Frank R. Pitzer (Alt.)		Present
TRIGG	W. N. Richardson	Present	Present

Fourth District

BRECKINRIDGE	James G. Sills	Present	
BULLITT	James W. Roney	Present	Present
GRAYSON	Charles L. Bland		
	V. F. Duvall (Alt.)		Present
GREEN	Robert L. Shuffett		Present
HARDIN	Fred C. Rainey	Present	Present
	Robert E. Robbins	Present	Present
HART	Keene M. Hill	Present	Present
LARUE	Marion A. Douglass, Jr.	Present	Present
MARION	Robert H. Wilber		
MEADE			
NELSON	Kenneth Stinnette	Present	Present
TAYLOR	Forest Shely		Present
WASHINGTON	Charles D. Howard		Present

Fifth District

JEFFERSON	John D. Allen, Jr.	Present	Present
	L. Douglas Atherton		Present
	James G. Baker		Present
	Frank A. Bechtel	Present	Present
	C. F. Blankenship (Alt.)		Present
	Thomas E. Booth	Present	Present
	Alan Bornstein		Present
	McHenry S. Brewer		Present
	Glenn W. Bryant	Present	Present
	Daniel W. Burke		Present
	W. Neville Caudill	Present	Present
	Morgan R. Colbert	Present	Present
	Stanley W. Collis	Present	Present
	Fred E. Coy, Jr.	Present	Present
	John H. Doyle	Present	Present
	Andrievs J. Dzenitis		Present
	Edward J. Fadell		
	William Gillespie	Present	Present
	John N. Goldsborough		Present
	Richard F. Greathouse	Present	Present
	Charles M. Hargadon	Present	
	Walter I. Hume, Jr.	Present	Present
	Michael G. Kemper	Present	Present
	Eugene H. Kremer, III	Present	Present
	Robert L. McClendon	Present	Present
	Clyde T. Moore	Present	Present
	Robert G. Overstreet	Present	Present
	Bernard I. Popham	Present	Present
	Clinton Ray Potts		Present
	James F. Rice	Present	Present
	Gradie Rowntree (Alt.)	Present	Present
	W. Fielding Rubel	Present	Present
	William T. Sandman	Present	Present
	David C. Shipp		
	Robert S. Tillett	Present	Present
	Edward J Warrick		

Sixth District

ADAIR	Millard C. Loy	Present	
ALLEN	Earl P. Oliver	Present	Present
BARREN	William H. Bryant	Present	
BUTLER	D. G. Miller, Jr.,		
CUMBERLAND	Joseph Schickel	Present	Present
EDMONSON			
LOGAN	C. V. Dodson	Present	
METCALFE	L. P. Emberton		
MONROE	William R. Bushong		
SIMPSON	Douglas R. Alvey		
WARREN	Keith Coverdale	Present	Present
	Nelson B. Rue	Present	Present
	James O. Willoughby	Present	Present

Seventh District

ANDERSON	Boyd Caudill	Present	
CARROLL	Edgar S. Weaver		
FRANKLIN	Dallas C. Hagg		Present
	Sandford L. Weiler	Present	Present
GALLATIN	John D. Fielding	Present	
GRANT	Leonore P. Chipman	Present	Present
HENRY	R. L. Houston, Jr.	Present	
OLDHAM			
OWEN	Maurice Bowling		
SHELBY	Ronald Waldridge	Present	Present
SPENCER	W. K. Skaggs		
TRIMBLE	Carl Cooper, Jr.	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 20 and 22.

Was Your Delegate Present?

Eighth District

BOONE	Glenn F. Baird	Present	Present
CAMPBELL-KENTON	Carl J. Brueggemann	Present	Present
	Thomas L. Heavern, Jr.	Present	Present
	Donald W. Janney	Present	Present
	Louis J. Nutini		
	W. Vinson Pierce	Present	Present
	R. C. Smith	Present	Present
	R. J. Timmerman (Alt.)		Present

Ninth District

BATH			
BOURBON	Richard Wever		Present
BRACKEN	J. M. Stevenson	Present	Present
FLEMING	R. W. Fidler		Present
HARRISON	Don R. Stephens	Present	Present
MASON	Robert M. Blake	Present	Present
NICHOLAS	Allen J. Hamon		
PENDLETON	W. M. Townsend		
ROBERTSON			
SCOTT	C. R. Lewis	Present	Present

Tenth District

FAYETTE	Ted D. Ballard		
	John F. Berry, Jr.		Present
	Leslie W. Blakey	Present	Present
	Peter P. Bosomworth	Present	Present
	N. Lewis Bosworth	Present	Present
	Thomson R. Bryant, Jr.	Present	Present
	Winston L. Burke	Present	Present
	Donald E. Edger	Present	Present
	Richard D. Floyd	Present	Present
	Richard F. Hench	Present	Present
	James B. Holloway, Jr.	Present	Present
	Irving F. Kanner (Alt.)	Present	Present
	W. Porter Mayo	Present	Present
	Richard B. McElvein	Present	Present
	Carl Scott (Alt.)		Present
	John E. Trevey	Present	Present
JESSAMINE	J. Sankey Williams	Present	Present
WOODFORD	Norman S. Fisher	Present	Present

Eleventh District

CLARK	Bennett N. Asher		
ESTILL			
JACKSON	Donald L. Peterson		
LEE	Carl Noble		
MADISON	Dwight L. Blackburn		
MENIFEE			
MONTGOMERY			
OWSLEY	A. L. Taulbee		
POWELL			
WOLFE	Paul F. Maddox		

Twelfth District

BOYLE	W. Mack Jackson		
	John M. Baird (Alt.)	Present	Present
CASEY	George W. Sweeney		
CLINTON	Earnest A. Barnes		Present
GARRARD	O. S. Playforth	Present	Present
LINCOLN	T. Julian Wright		
McCREARY			
MERCER	E. H. John	Present	
PULASKI	John P. Hill	Present	
	Stephen B. Kelley	Present	
	William O. Massey (Alt.)		Present
ROCKCASTLE			
RUSSELL	Charles E. Peck		
WAYNE	John W. Simmons		
	R. B. Breeding (Alt.)	Present	

Thirteenth District

BOYD	D. H. Donahoe (Alt.)	Present	Present
	C. Gordon Gussler	Present	Present
	G. E. Robinson		
	Charles A. Webb	Present	Present
CARTER			
ELLIOTT	John F. Greene		
GREENUP	Manuel S. Garcia		Present
LAWRENCE	A. B. Richards	Present	Present
LEWIS			
MORGAN	George R. Bellamy		
ROWAN	George Barber		Present

Fourteenth District

BREATHITT	Robert E. Cornett		
FLOYD	Lowell F. Roberts	Present	Present
JOHNSON	Jerry D. Fraim	Present	Present
KNOTT	D. G. Barker		
	Gene T. Watts (Alt.)		Present
LETCHER	James B. Tolliver	Present	Present
MAGOFFIN			
MARTIN	Raymond D. Wells	Present	
PERRY	Keith Cameron		Present
PIKE	Harry Altman	Present	Present
	E. R. Thompson	Present	Present

Fifteenth District

BELL	Francis Forde	Present	Present
	Charles B. Stacy	Present	
CLAY	William E. Becknell	Present	Present
HARLAN	Howard Elliot	Present	Present
	John Ritter (Alt.)		Present
	Walter H. Stepchuck		
KNOX	Harold L. Bushey	Present	Present
LAUREL	Samuel Adams	Present	
LESLIE	Gene D. Bowling		
WHITLEY	R. D. Pitman	Present	Present

Dr. William Keller Gives Reminder On Driver Limitation Law

"All Kentucky physicians should be reminded of the laws we have in this State regarding the medical aspects of driver limitation." according to William K. Keller, M.D., Chairman, AMA Committee on Medical Aspects of Automotive Safety and a member of the KMA Committee on Community and Rural Health.

In 1964, Kentucky's legislature passed a law that states:

Medical examination for driver limitation will now be ordered by state police or the Division of Driver Licensing when a driver 1) is involved in three traffic accidents within 24 months, 2) volunteers that he "blacked out," didn't know what happened, or has contributing medical problems, 3) displays obviously impaired abilities, or 4) is believed, on the basis of a sworn affidavit, to have physical or mental deficiencies, making him potentially unsafe to drive.

Such an individual will be notified by letter from the Division of Driver Licensing to appear before a physician of his own choice (at his expense) or the nearest county health officer (at no cost) within 45 days of such notification. A "Medical Report" will be completed by the individual, answering questions on medical and accident history (Section I: pages 1 and 2) and the physician accomplishing Section II (pages 3 and 4). The physician will mail the completed four-page report to the Department of Health, Division of Accident Prevention, Frankfort, and an attached postcard to the Division of Driver Licensing, indicating that examination has been made.

The "Medical Review Board" composed of five physicians (selected by the Commissioner of Health from nominations made by KMA Trustees) will periodically meet to evaluate such cases and advise the Division of Driver Licensing concerning the maintenance, suspension, or restriction of driving privileges. The Division of Driver Licensing will then notify the individual; if desired, he may appeal such decision and submit additional data. The case will then be mailed, by number designation only, to an anonymous "Appeals Board" of nine physicians selected as above. This board may request additional examinations (EEG, ECG, etc.) or reply directly on the information submitted.

Driving privileges will *not* be suspended unless or until 1) 45 days have elapsed and the individual has not reported for examination, or 2) The Review Board has by majority vote recommended suspension, or 3) actions returned in appeal to the Division of Driver Licensing have been decided by a majority vote of the Appeals Board.

Price Freeze Information For Kentucky Physicians

In accordance with KMA's policy of keeping the Kentucky physicians informed on President Richard Nixon's Executive Order on stabilization of prices, rents, and salaries, we are publishing the following communication from the AMA field staff on this subject:

"Under The President's Executive Order on stabilization of prices, rents, wages, and salaries, final cost settlements will continue to be made in accordance with established reimbursement principles. At the point in time when such settlements involve costs attributable to the period covered by the Executive Order, appropriate review will be made to insure that there were no increases in costs because of increases in prices, rents, wages, and salaries in the freeze period. Current recognition of increased incurred reasonable costs through adjustment of interim rates may be made only in those instances where: 1) the increase results from cost settlement findings for a prior accounting period or, 2) the provider submits adequate documentation to establish that increases in costs in no way include any increases in prices, rents, wages, or salaries incurred subsequent to August 14, 1971.

"Reasonable charge reimbursement will be limited to those reasonable charges established through application of the prescribed criteria and methodology and utilizing calendar year 1970 charge data for application beginning July 1, 1971. During the period covered by the Executive Order, increases of customary charges on an individual exception basis which had not been granted as of August 14, 1971, are not to be granted. *Charges by a physician or other supplier of services during the stabilization period that exceed charges imposed by that physician or supplier in a substantial volume of cases in the 30-day period prior to August 14, 1971, are not to be included in the calendar year 1971 charge data accumulated as a basis for setting the carrier charge screens for fiscal year 1973.*

"All contractors are reminded that their operation must be governed by the principles of the Executive Order so that no increases in administrative costs are to result from any increases in prices, rents, wages, and salaries after August 14.

"Any violation or apparent violation of The President's Order noted by an intermediary or carrier in carrying out its responsibilities under its contract with The Secretary must be promptly reported by the intermediary or carrier to the Office of Emergency Preparedness.

"More detailed information will be transmitted shortly. The foregoing provisions have been reviewed and approved by the Cost of Living Council."

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(Act of August 12, 1970: Section 3685. Title 39, United States Code)

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11. Extent and nature of circulation:

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1. Sales through dealers and carriers, street vendors and counter sales:	135	140
2. Mail subscriptions:	2701	2706
C. Total paid circulation:	2836	2846
D. Free distribution by mail, carrier or other means:		
1. Samples, complimentary, and other free copies:	328	341
2. Copies distributed to news agents, but not sold:	0	0
E. Total distribution	3164	3187
F. Office use, left-over, unaccounted, spoiled after printing:	57	63
G. Total:	3221	3250

I certify that the statements made by me above are correct and complete.
Robert G. Cox, Managing Editor

KMGA Golf Tournament Winners Named

The annual fall tournament of the Kentucky Medical Golf Association was played at the Harmony Landing Country Club on September 23. Sixty-one of the association's 71 members participated, according to Mervel V. Hanes, M.D., President of KMGA.

Doctor Hanes lists the winners as follows: "Art Daus, Louisville, shot a 76 to capture Low Gross Championship. Gene Snowden, Winchester, was runner-up with an 82. Low Gross Championship—Senior Division—was won by Russ Davis, Pikeville, with an 83, when Hal Graves 3 putted the 18th green to finish with an 84."

Other winners are:

Low Net Championship (Bankers System)	Bob De Weese	59
Runner Up— Low Net	Charles Bryant	62
3rd—Low Net (play off)	John Devlin	63
4th—Low Net (play off)	Lud Segerberg	63
5th—Low Net (play off)	Bernie Weiss	63
6th—Low Net (play off)	Bill Haney	65
Blind Bogey (net)	Glenn Bryant	74
Longest Drive, #15	John Karibo	
Closest to hole drive, #16	Dobby Pitman	

Any physician interested in joining KMGA is asked to write Donald L. Ware, 750 Medical Towers South, Louisville, Kentucky 40202.

James D. Hull, III, M.D., has joined Warren H. Proudfoot, M.D., in the practice of general surgery in Morehead. A 1964 graduate of the University of Chicago College of Medicine, Doctor Hull interned and served his residency at the Pennsylvania Hospital.

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From The

KMA Postgraduate Medical Education Office

NOVEMBER

18 Third Annual Pulmonary Symposium, Jewish Hospital and Louisville T.B. & Respiratory Disease Association, 10:00 a.m., Classroom A, Jewish Hospital, Louisville

19-20 Postgraduate course, "Psychiatry Put into Practice," University of Kentucky Medical Center. For further information write: Frank R. Lemon, M.D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506

22 Nineteenth Annual David W. Yandell Lecture, "Patterns of Change in Medical Education," by Rudolf J. Noer, M.D., University of Louisville School of Medicine, Health Sciences Center, 11:00 a.m.

23 Postgraduate course, "Delayed Onset of Puberty," by Duncan Macmillan, M.D., Associate Professor, Department of Pediatrics, University of Louisville School of Medicine, 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

DECEMBER

16 Fourteenth Annual Postgraduate Medical Seminar, Norton Memorial Infirmary and Kentucky Chapter, American Academy of Family Physicians, Norton Infirmary, Louisville

17-18 Postgraduate course, "The Practical Ophthalmology of Childhood," University of Kentucky Medical Center. For further information write: Frank R. Lemon, M.D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506

JANUARY

25 Postgraduate courses, "Common Pediatric Eye Problems," by William C. Edwards, M.D., Associate Professor in Ophthalmology, University of Louisville School of Medicine; "Osteomyelitis Septic Arthritis in Children," by James W. Harkess, M.D., Kosair Professor of Orthopedic Surgery; 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

IN SURROUNDING STATES

NOVEMBER

28 Twelfth Annual Meeting, American College of Nutrition, New Orleans, Louisiana. Hotel reservation should be made through the AMA Housing Bureau

28-Dec. 1 Twenty-fifth Clinical Convention of American Medical Association, New Orleans, Louisiana

DECEMBER

1-2 Postgraduate course, "Neurosurgical Techniques," Cleveland Clinic Educational Foundation, Cleveland, Ohio

4-9 Thirtieth Annual Meeting, The American Academy of Dermatology, Palmer House, Chicago, Illinois

6-9 Postgraduate course, "Pulmonary Function in Health and Disease," Louisiana State University School of Medicine, New Orleans, $125 tuition. For further information write: Louisiana Thoracic Society, Suite 1504, 333 St. Charles Ave., New Orleans, La. 70130

8-9 Postgraduate course, "Current Concepts in Ophthalmology," Cleveland Clinic Educational Foundation, Cleveland, Ohio

9 Second Annual Day-Long Workshop on Practical Aspects of Fluid and Electrolyte Management, 8:30 a.m., The Jewish Hospital Auditorium, Cincinnati, Ohio

JANUARY

17-19 American College of Surgeons sectional meeting, Miami, Florida

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.



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Cream of Potato	58	Green Pea	116
Chicken Vegetable	60	Cream of Shrimp (Frozen)	132
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The History of Birth Control



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Abortion and infanticide have, throughout history, been the final and desperate resort of women who were unable to control their fertility, but for almost 4,000 years they have sought ways to prevent conception.

In ancient Egypt they used pessaries of crocodile dung or tried to clog the motile sperm with honey and a gumlike substance. The women of Islam used tampons of pomegranate pulp and rock salt. In Japan they burned little balls of "burning grass" on the *mons veneris* or, more practically, tried to cover the mouth of the uterus with disks of oiled bamboo tissue paper. In the 18th Century in France upper-class women rediscovered the vaginal sponge, a device mentioned in sources as old as the Talmud.

It may seem now that such advances as oral contraception and the IUD have freed women from this often fruitless search and consequent suffering, but there are millions of women in the United States and elsewhere who have less knowledge of, and less recourse to, contracepti than Egyptian women of the Twelfth Dynasty. Nothing is more urgent to all of us than to bring them help. We cannot long support the ecologic pressures of an additional 70 million Earth inhabitants each year.

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Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study of Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function, increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: **1.** Royal College of General Practioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

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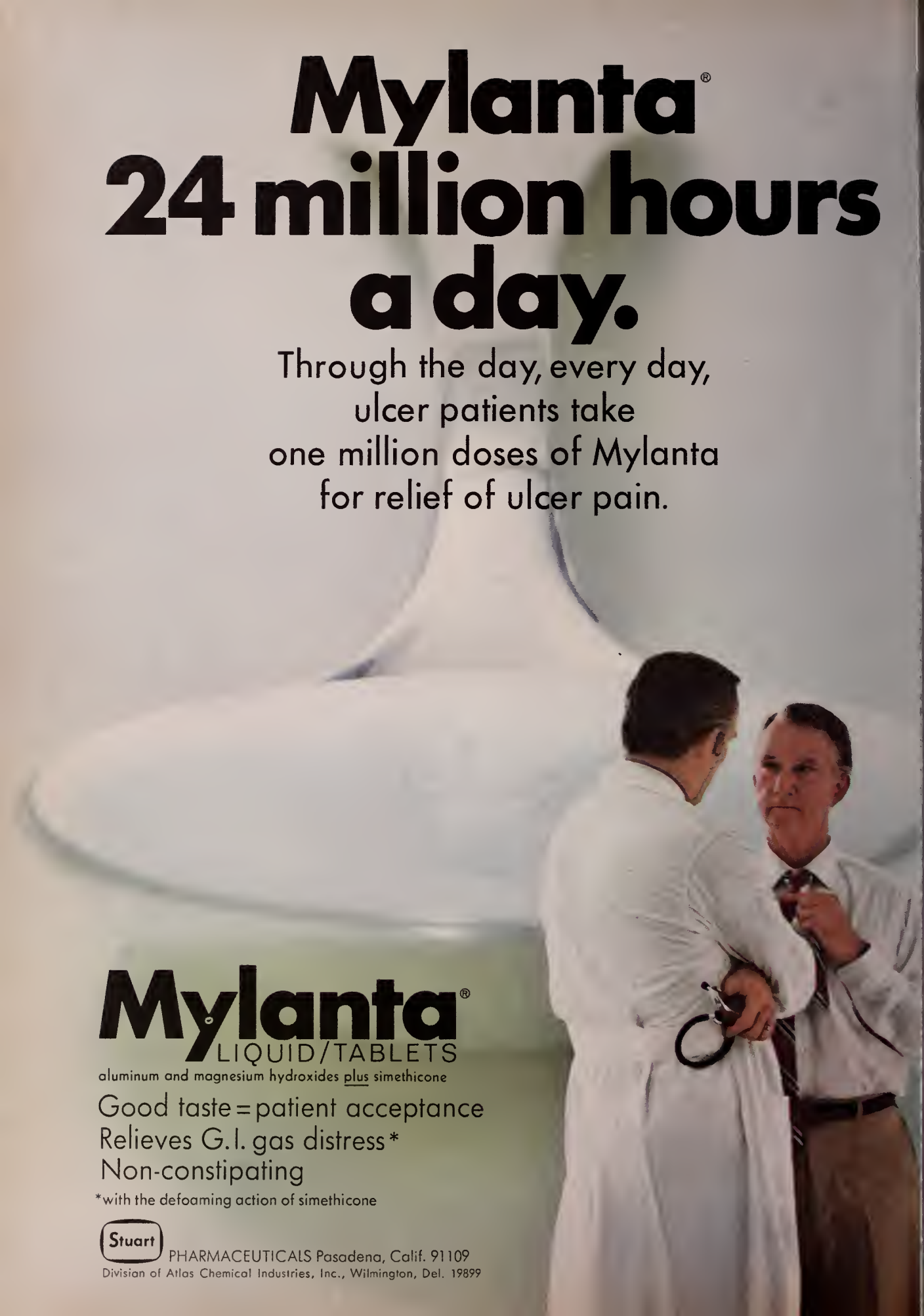
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Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

Stuart PHARMACEUTICALS Pasadena, Calif. 91109
Division of Atlas Chemical Industries, Inc., Wilmington, Del. 19899

25th AMA Clinical Convention

November 28 - December 1, 1971
New Orleans

What is the best way to keep pace with the latest medical techniques and advances?

Participate in the AMA's 25th Clinical Convention in New Orleans on Nov. 28-Dec. 1, 1971! Take part in a convention where participation is the key word. Register for Postgraduate courses. Use this opportunity to discuss and evaluate your problems and findings with others in your particular field.

Industrial and scientific exhibits will inform you about the latest research and the newest products and services available. Together with the scientific sessions, this information will be of value when you return to your practice.

The Scientific Program will offer in-depth courses on "Behavioral Problems in Children and Adolescents," "Cardiovascular Disease," and "Fluid and Electrolyte Balance."

Other sessions of importance will discuss the "Diagnostic Evaluation and Management of Joint Diseases," "Dermatological Problems in Everyday Practice," "Current Concepts of Gastroenterology," "Office Gynecology: Management of Common Problems" and a "Symposium on Diverticular Disease of the Colon: Current Concepts."

Elegance and an old-world flavor make New Orleans an exceptional site for the 25th Clinical Convention. The Convention Center provides excellent facilities. Hotels in or near the famed French Quarter offer choice accommodations.

Consider bringing the family. They can explore the many historic sites in and around the city, ride a steamship on the 'mighty' Mississippi, shop for antiques, or browse in a fine selection of stores. You'll find the charm of New Orleans extends to its restaurants where you'll sample the finest in French and Creole cooking.

This is a meeting in which you should participate. Make plans now to attend this important AMA Scientific Meeting.



When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

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Kantrex®
KANAMYCIN SULFATE

experience

A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm.,...and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
(9) 7/27/71
For complete information, consult Official Package Circular

Warning: The major toxic effect of parenterally administered kanamycin sulfate is its action on the auditory portion of the eighth nerve. High frequency deafness usually occurs first and can be detected by audiometric testing. Tinnitus or vertigo may occur and are evidence of vestibular injury and impending bilateral, irreversible deafness. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in postoperative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid and furosemide. Safety in pregnancy is not established.

Indications: Serious infections due to susceptible strains of *E. coli*, Proteus sp., *Enterobacter aerogenes*, *K. pneumoniae*, *Serratia marcescens* and *Mima-Herellea*. Culture and sensitivity studies should be performed.
Contraindications: A history of hypersensitivity to the drug. Prior auditory damage by kanamycin or other agents may be a contraindication if effective, alternative therapy is available.

Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary. In azotemic patients, the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.
Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.
Dosage and Administration: The usual dose is 7.5 mg./Kg./12 hours I.M. The average dose is 1 Gm. daily for adults and children. The maximum total daily adult dose should not exceed 1.5 Gm. by all routes of administration. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours. If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.
Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations; 0.5 Gm. in 2 ml. 1.0 Gm. in 3 ml. Also available—Pediatric Injection 75 mg. in 2 ml.
A.H.F.S. Category 8:12.28

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For Insomnia...

Noludar® 300

(methyprylon)

one capsule for the rest of the night



Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

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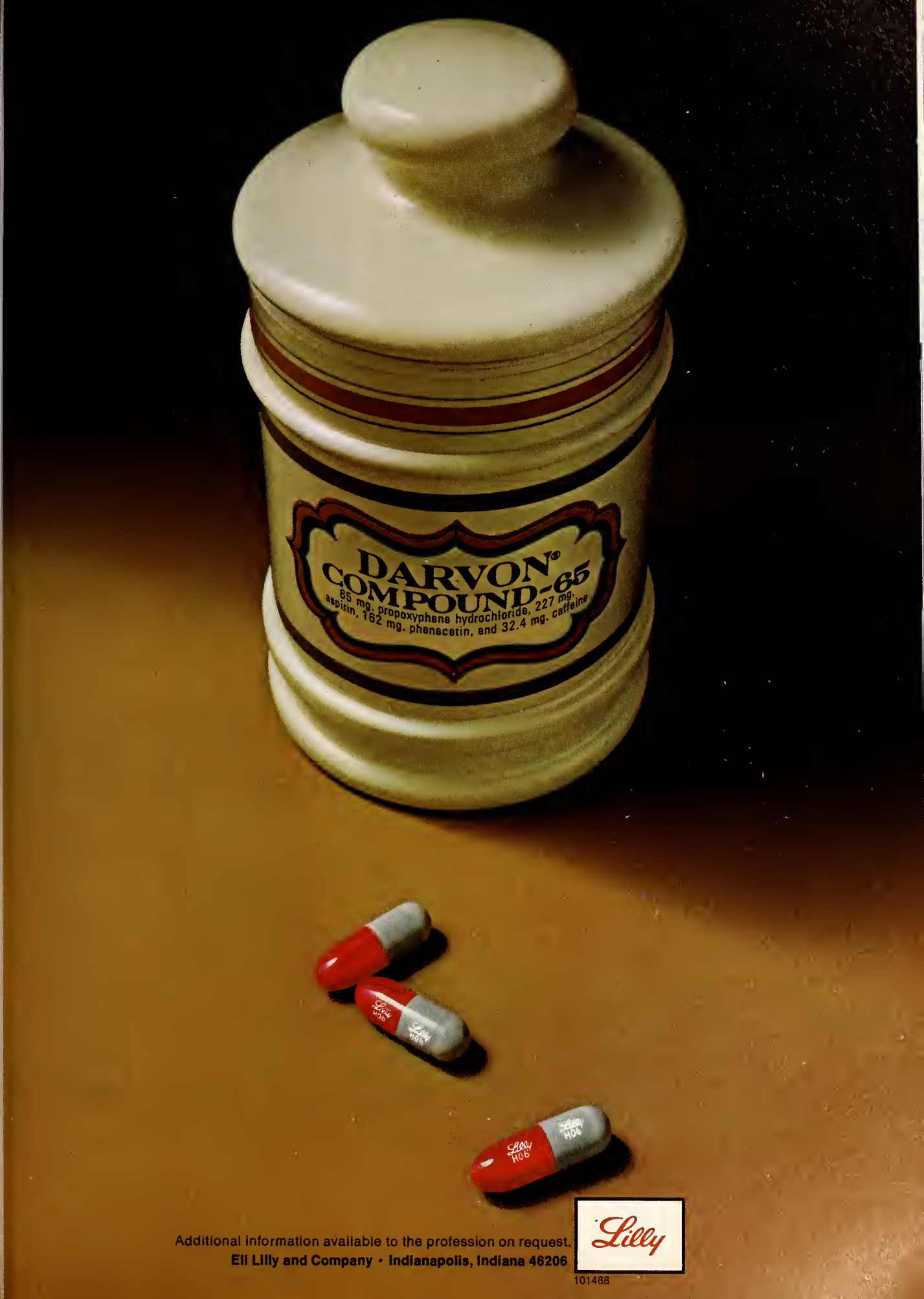
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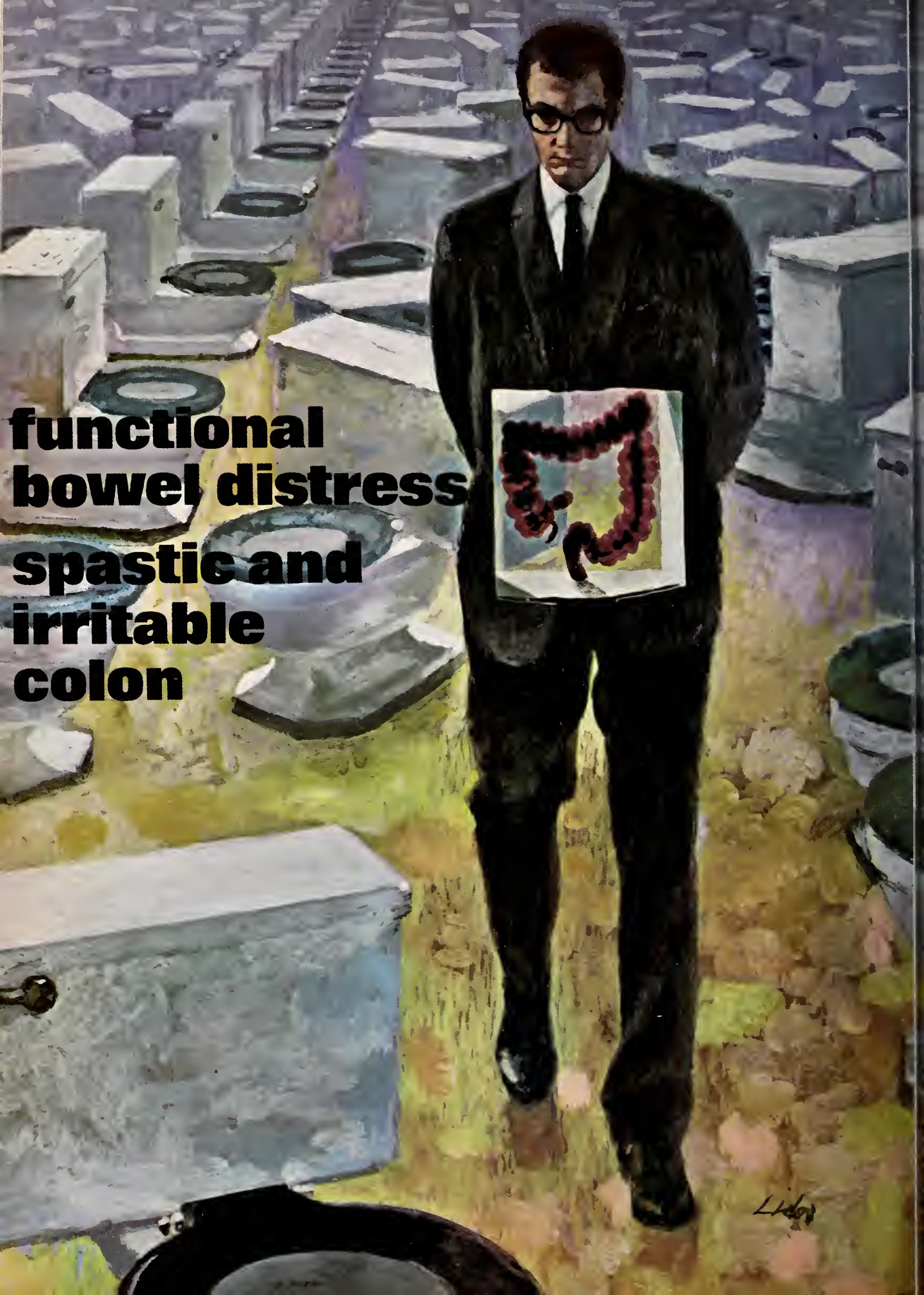


Additional information available to the profession on request.

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functional
bowel distress
spastic and
irritable
colon

move up to "the Robinul response"

In treating hypermotility associated with functional lower G-I disorders are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent antispasmodic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of hypermotility, making it a highly effective agent in functional bowel distress, as well as in spastic and irritable colon. Robinul Forte also exerts a more selective action on the gastrointestinal tract. If the patient has a "one tract mind" concerning his lower G-I symptoms, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

when lower G-I symptoms demand a potent synthetic antispasmodic

Robinul® 2 mg. Forte (glycopyrrolate)

■ **INDICATIONS** Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue tablets engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. A·H·ROBINS



if skin is infected, or open to infection...

choose the topicals that give your patient–

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- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

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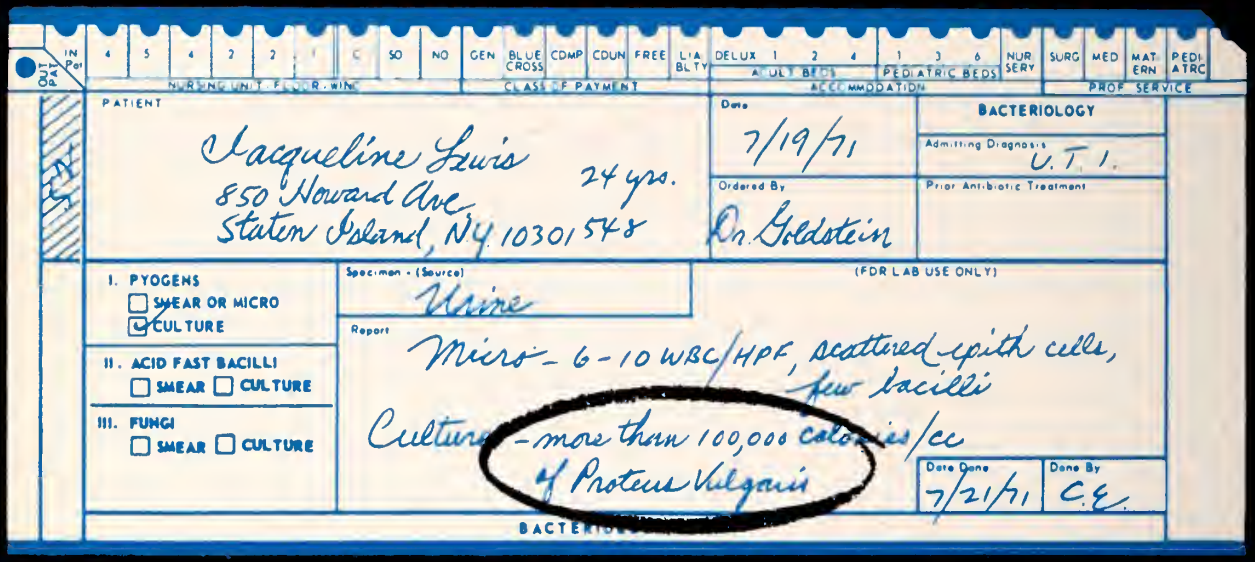
A gratifying announcement about Empirin® Compound with Codeine



You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



the choice is clear:

Pyopen®

(sterile disodium carbenicillin)

A serious urinary tract infection...
Proteus vulgaris, confirmed by pure culture. Fortunately, the strain proves sensitive to carbenicillin and the patient is not allergic to penicillins. The choice is clear: Pyopen.

Unlike other antibiotics currently available for the treatment of Gram-negative sepsis, there are no reports of nephrotoxicity or ototoxicity with Pyopen therapy. Particularly valuable in urinary infections, because of its exceptionally high urine levels, its effectiveness against *Ps. aeruginosa* and *Proteus* species has been amply confirmed by clinical experience and microbiologic studies.

Pyopen is a product of Beecham, the company which pioneered most of today's semi-synthetic penicillins. Your Beecham-Massengill representative would like to give you proof of our dedication to the concept of Total Service.

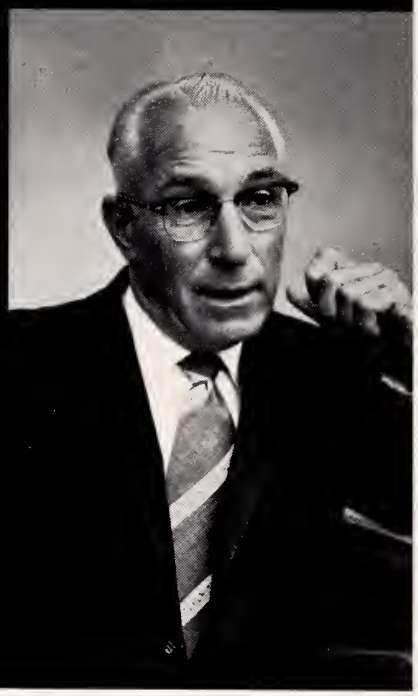
THE TOTAL SERVICE CONCEPT:
Beecham-Massengill's dedication to the concept of total service is exemplified by the Pyopen Program — offering valuable teaching-learning materials and an added measure of personal attention: *Gram-Negative Sepsis*, a multimedia presentation by leading American medical authorities...*A Profile of Pseudomonas*, a monograph for the clinical microbiologist... *24-hour consultation service* in matters relating to carbenicillin (phone: 201-778-9000)... *emergency supply*, a novel plan for assuring the continual availability of Pyopen to hospitals specifying this brand of carbenicillin.

For additional information about the Beecham-Massengill Total Service Concept see our representative or write to us directly.

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Bristol, Tennessee 37620

PRESCRIBING INFORMATION **Indications:** Primarily for treatment of infections due to susceptible strains of *Pseudomonas aeruginosa*, *Proteus* species (particularly indole-positive strains), and certain *Escherichia coli*. Clinical effectiveness has been demonstrated in the following infections when due to these organisms: Urinary tract infections; severe systemic infections and septicemia; acute and chronic respiratory infections (while clinical improvement has been shown, bacteriologic cures cannot be expected in patients with chronic respiratory disease and cystic fibrosis); soft tissue infections. Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps. aeruginosa*, *Proteus mirabilis*, *Pr. morganii*, *Pr. rettgeri*, *Pr. vulgaris*, *E. coli*, *Enterobacter* species, *Salmonella* species, *Hemophilus influenzae*, and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus aureus* (nonpenicillinase-producing), *Staph. albus*, *Diplococcus pneumoniae*, Beta-hemolytic streptococci, and *Streptococcus faecalis*. Some newly emerging pathogenic strains of *Herellea*, *Mima*, *Citrobacter*, and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage In Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. Vein Irritation and Thrombophlebitis—particularly when undiluted solution is injected directly into the vein. **How Supplied:** Available in 1 Gm. and 5 Gm. vials.
Before prescribing or administering, see package circular or PDR.

"Drug research gives me the tools that save lives."



A family doctor looks at new developments in the pharmaceutical industry. And he speculates on the future.

When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

Another point of view . . . Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.

This advertisement has been reaching consumers thru THE ATLANTIC, FAMILY HEALTH, HARPER'S MAGAZINE, NEWSWEEK, SATURDAY REVIEW, TIME and U.S.NEWS & WORLD REPORT.

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libida, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U S PATENT NO 3,001 910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Informotion—Composition: Eoch white, beveled, compressed toblet contains: Quinine sulfote, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention ond treotment of nocturnol ond recumbency leg muscle cramps, including those assocloted with orthritis, diabetes, voricose veins, thrombophlebitis, orteriosclerosis ond static foot deformities. **Controindicatians:** QUINAMM is controindicoted in pregnancy becouse of its quinine content. **Precautions/Adverse Reactians:** Aminophylline may produce intestinol cromps in some instances, ond quinine may produce symptoms of cinchonism, such os tinnitus, dizziness, ond gastrointestinol disturbonce. Discontinue use if ringing in the eors, deofness, skin rosh, or visual disturbonces occur. **Dasage:** One tablet upon retiring. Where necessory, dosage may be increased to one tablet following the evening meal ond one toblet upon retiring. **Supplied:** Bottles of 100 ond 500 toblets.

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Q103 2/71

Quinamm™
(quinine sulfote 260 mg., ominophylline 195 mg.)

Specific therapy for night leg cramps



of the tetracycline-nystatin products

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TETRACYCLINE HCl 25 mg. NYSTATIN 25,000 U./cc.

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374-1

For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

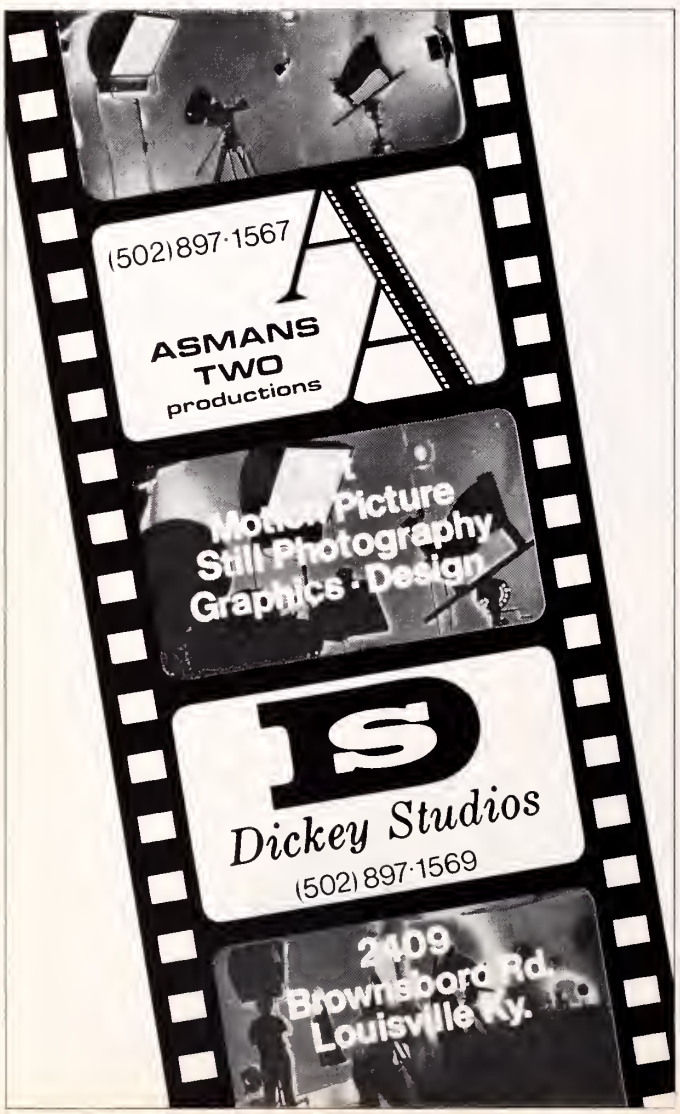
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Mark Your Calendar . . .

1972
KMA Interim Meeting

Holiday Inn, Somerset

April 13, 14



Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

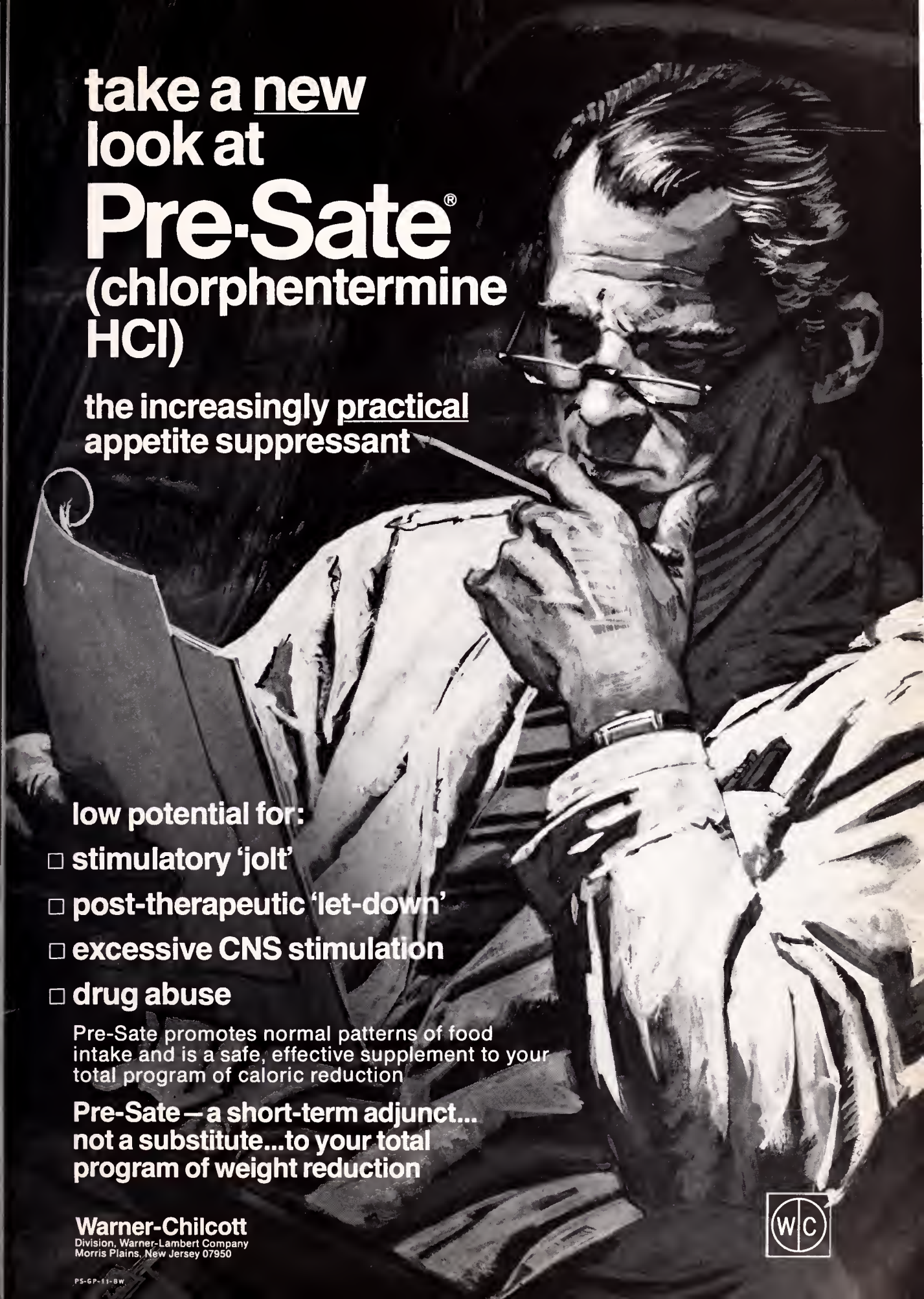
Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


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Pre-Sate®
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low potential for:
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The scientific program is outstanding, with three in-depth postgraduate courses on Behavioral Problems in Children and Adolescents; Cardiovascular Disease; and Fluid and Electrolyte Balance. Other sessions you'll want to attend include Diagnostic Evaluation and Management of Joint Diseases; Dermatological Problems in Everyday Practice; Current Concepts in Gastroenterology; Office Gynecology: Management of Common Problems, and a Symposium on Diverticular Disease of the Colon. Along with these sessions are dozens of scientific and industrial exhibits to help inform you of the latest research and the newest products and services.

Plan to be there. See the complete scientific program and registration forms in the October 18th issue of JAMA.

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AMA Clinical Convention
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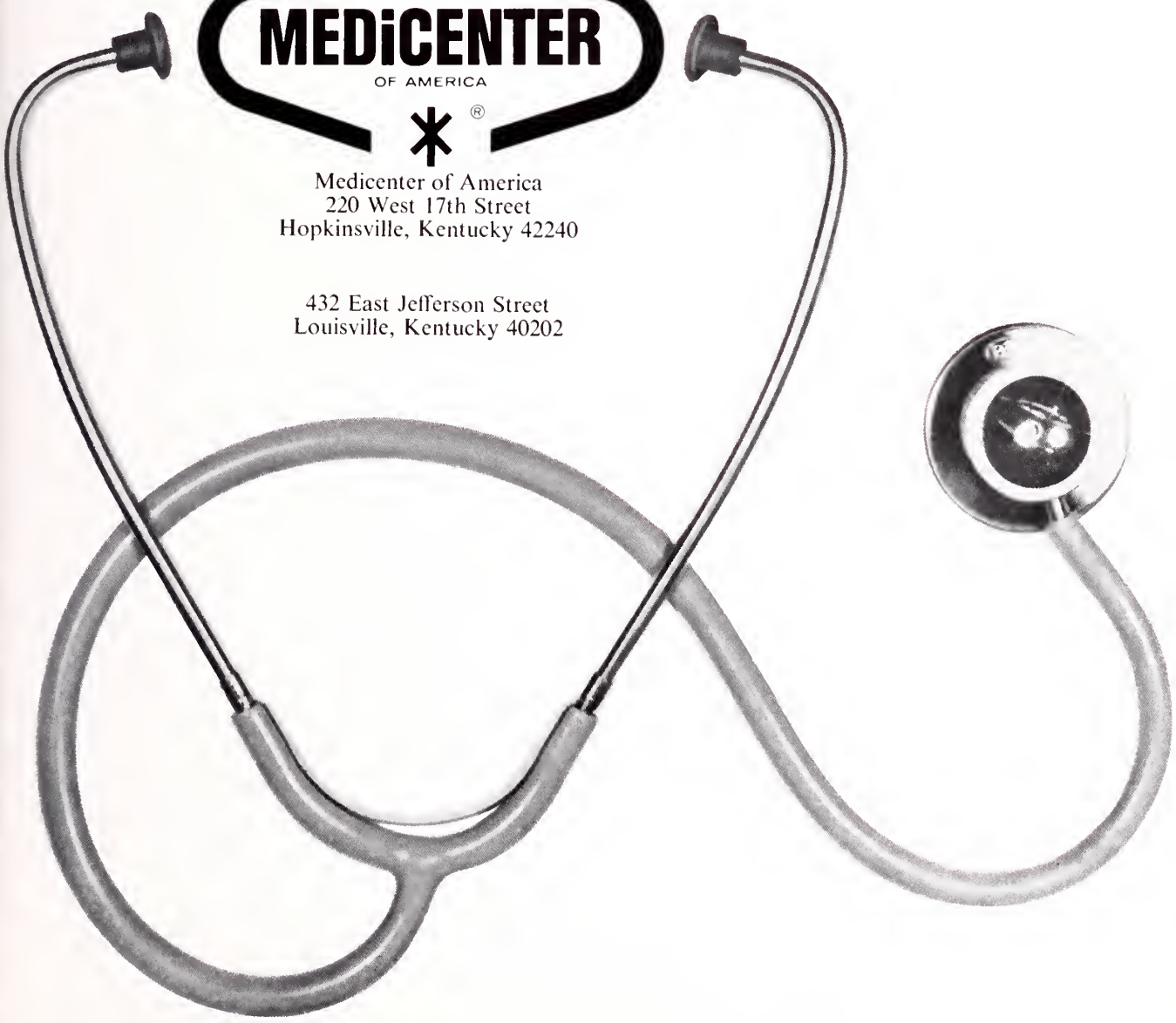
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use coution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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VOLUME 69 DECEMBER 1971 NUMBER 12

The Journal of The KENTUCKY Medical Association

Season's Greetings



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Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electro-encephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

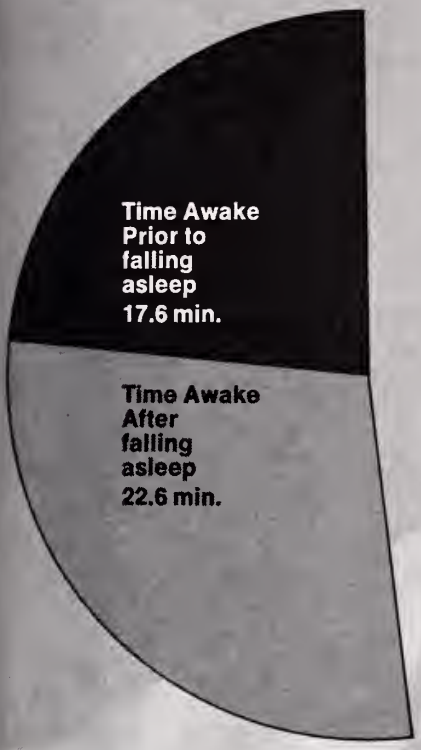
Before Dalmane (flurazepam HCl)



Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

yand slept through the night

On
Dalmane
(flurazepam HCl)



Average sleep laboratory measurements in cited studies

Parameter	Before Dalmane	On Dalmane
Time required to fall asleep	33.6 min.	17.6 min.
Wake time after onset of sleep	48.7 min.	22.6 min.
Number of wakeful periods after onset of sleep	12.2	8.4
Total sleep time	420.0 min.	447.5 min.
Total sleep percent	88.6	94.5

Clinical effectiveness as proven in the sleep laboratory

Dalmane®
(flurazepam HCl)

One 30-mg capsule h.s.—usual adult dosage.
One 15-mg capsule h.s.—initial dosage for elderly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Who's afraid of the big bad enema?

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MESSAGE FROM THE PRESIDENT

Your Headquarters Office

WITH the new building at KMA Headquarters about one-third complete, there are still some members questioning the necessity of additional space. The reason is very simple.

In order to do the work demanded by you, the KMA members, the staff has more than doubled in number since the original building was completed. Most of the office space is doing double duty—taking care of two staff members per office.

The first floor of the new building will be occupied by separating the staff now present, except for one office. The basement is scheduled to occupy the Division of Licensure, KMA Membership Department, and related equipment to be utilized by these groups.

The newly formed Foundation will undoubtedly require office space. KEMPAC and the Auxiliary definitely utilize space, while the specialty groups may require it soon.

The more government involvement there is in medical practice, the more work for the staff of KMA. There will be a need for more room in the very near future. The second story, left unpartitioned, only cost $40,000. If the second floor had been added later, the cost would have been three to four times as much.

If you are still unconvinced, come visit your Headquarters!

Best Wishes for the Holiday Season and New Year

From Your Officers and Staff

John S Harter



ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

The Federal Employee Program

The Federal Employee Program is the largest voluntarily enrolled group for health care coverage in the United States. Blue Cross and Blue Shield have contracted with the Civil Service Commission to provide Federal Employees nationwide with two basic levels of benefits (High Option or Low Option). Federal Employees have the choice of enrolling with Blue Cross and Blue Shield or a Commercial Insurance Carrier. Currently over 65 percent of those enrolled in Kentucky, or 73,000 people, have chosen Blue Cross and Blue Shield. All physicians were recently notified of administrative changes in the program.

Q. Why was it necessary to institute change in the Program's administrative guidelines?

A. *In recent months, there have been dramatic increases in the cost of providing health care benefits to government workers and their dependents, and there has also been a significant increase in the utilization of services in some benefit areas. The projected underwriting loss for Blue Cross and Blue Shield Plans nationally has been estimated at over $60 million for 1971.*

Q. What benefit areas are affected and how?

A. *As communicated to all Physicians and Hospital Administrators in October of this year, the following specific areas have been identified as special problem areas requiring change in administration or intensified screening:*

I. Out-patient Diagnostic X-Ray and Laboratory Services
A definite medical diagnosis or suspected diagnosis must be shown on each out-patient Blue Cross or Blue Shield Claim for x-ray and/or laboratory charges. All such services must be related to the diagnosis and/or set of symptoms. When the billing for laboratory services is done by the physician, the claim form must indicate whether the services were performed in his office or by an outside lay or automated laboratory. If performed by an outside laboratory, please indicate the name and address of the laboratory and the actual charge of each test.

II. Co-ordination of Benefits
The Co-ordination of Benefits provision will continue to be strictly enforced.

III. Diagnostic Admissions
Hospital and physician charges related to diagnostic admissions that are not covered and disallowed under the Basic coverage, are not covered under Supplemental coverage. These charges (except relevant x-ray and laboratory procedures) will be the patient's responsibility.

IV. Termination of Benefits
The intent of the F.E.P. Contract is to provide in-patient benefits only for necessary hospital care. All cases will be screened for length of stay by diagnosis to determine medical necessity.

V. Medical Emergencies
All physical examinations (even when related to the medical emergency and performed within 72 hours of the onset) will not be considered part of the medical emergency. Any x-ray and/or laboratory service rendered with such physical examination must specifically relate to the medical emergency in order to be covered.

VI. Assistant-At-Surgery
It is required that the attending physician certify to the medical necessity of an Assistant-at-Surgery and the unavailability of a qualified resident, intern, or house physician when an Assistant-at-Surgery Claim is submitted.

(Continued on page 936)

MEDICAL SCHOOLS

The information in this column is designed to acquaint practicing physicians with the services of and the personnel active in various specialty departments and divisions of the two Kentucky medical schools. You may wish to file this page for future reference.

Department of Surgery

University of Kentucky College of Medicine

The Department of Surgery offers a variety of services in general and specialty surgery. Within the realm of general surgery are head and neck tumors, peripheral vascular disease, and endocrine surgery, as well as the usual surgical procedures on the thyroid gland and gastrointestinal tract, and hernias, hemorrhoids, varicose veins, and similar procedures.

The specialties represented by the Department are cardiothoracic surgery, performing open heart surgery as well as pulmonary resections; neurosurgery, performing all neurosurgical procedures, including stereotaxic work; ophthalmologic surgery, including retinal detachments, corneal transplants, and cataract removal; orthopedic surgery, performing acute orthopedic care, reconstructive surgery, and total hip replacement; pediatric surgery, caring for all general surgical problems of children; plastic and reconstructive surgery, providing all facets of cosmetic surgery, as well as hand surgery and care of burns; and urologic surgery, specializing in transuretheral resections and cystectomy with ileal loops, as well as the performance of renal transplantations in conjunction with general surgery.

These services are provided not only to help the physicians of Kentucky in more difficult and complicated cases, but also to provide total surgical care for any person in the Commonwealth desiring surgical care at a university medical center. As a base for training future surgeons, it is imperative that we see and take care of some of the common surgical diseases. We will be happy to provide consultation by phone or see specific patients for any physician in the Commonwealth who wishes to contact us. In order to make your task of reaching us easier, we have listed below the centrex numbers which, if dialed directly, will reach the surgeon's private office.

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Charles R. Sachatello, M.D.	General, Peripheral Vascular	233-6011
William R. Meeker, M.D.	General, Head and Neck Tumors	233-6121
Romeo S. Berardi, M.D.	General, Gastrointestinal Tract	255-4461 (VA) Ext. 4413
Robert L. Bradley, M.D.	General, Gastrointestinal Tract	255-4461 (VA) Ext. 4413
Patrick F. Hagihara, M.D.	General, Anorectal Disease	233-6123
Lester R. Bryant, M.D.	Cardiothoracic Surgery	258-2192

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W. Michael Bryant, M.D.	Plastic and Reconstructive Surgery	233-5195
Arthur A. Hellebusch, M.D.	Urologic Surgery, Transplantation	233-5393
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From the files of the

COMMITTEE FOR THE

STUDY OF MATERNAL MORTALITY

THIS 18-year-old married white, gravida 0, para 0, was seen in the emergency room at 9:35 a.m. on 1/6/70 complaining of right lower quadrant pain, nausea, and vomiting for 24 hours. The pain had become more severe and there was some dysuria. Her temperature was 98.2° axillary, 96° oral. Her pulse was 102/min. Her blood pressure was 94/60 mm Hg. Examination revealed a tender abdomen, especially in the right lower quadrant. She had some CVA tenderness, and her skin was pale. Menses were irregular. Her last menstrual period started "last month" and continued for 10 days. Pelvic exam revealed a firm cervix and pain on motion of the cervix. She was tender in the right adnexa, but there was too much guarding to be certain that there was a mass. CBC and urinalysis were obtained. Normal saline was started at 10:50 a.m., to be followed with Ringer's Lactate. Her hemoglobin on admission was 8.8 gm% with a hematocrit of 24.9%. Urine showed some mucus, no albumin or sugar, and no bacteria, 1 to 4 wbc's, and an occasional rbc. She was typed and crossmatched for 3 units of blood. She was kept NPO, and her blood pressure was watched closely. One unit of blood was ordered to be given as soon as available. The white blood count was 29,900 with 90 segs, 1 stab, 6 lymphs, and 3 monocytes. The initial impression was acute appendicitis, rule out ruptured ectopic or dysfunctional uterine bleeding and severe anemia.

She was admitted to the floor at 12:45 p.m. She received 30 mg of Talwin for pain at 2:20 p.m. Her blood pressure was 118/62 mm Hg. Pulse was 140/min. Ringer's Lactate was started at 3:10 p.m. At 3:30 p.m., 1,000 ml of D5W was started in the left arm, and one unit of blood was added to the IV in the right arm at 4:00 p.m. She was taken to surgery. Under general anesthesia, a large amount of blood and clots were evacuated from the peritoneal cavity. The right tube was found to be perforated, and was removed. About 1,500 ml of blood and clot were estimated to have been evacuated from the peritoneal cavity. The patient's blood pressure and pulse remained stable throughout the operation, and she left the operating room in good condition. She went to the recovery room at 5:40 p.m. Her blood pressure was 112/70 mm Hg. Her pulse was 132/min and respirations 24/min; 500 ml of blood was running in the left arm and 1,000 ml of D5W was running in the right arm.

Her blood count reported at 2:00 p.m., prior to surgery, was Hct 19.5%, Hgb 6.7 gms%, white count 26,000, 89 neutrophiles, 2 stabs, 6 lymphs, and 3 monos. A blood count, probably after surgery, revealed Hct 28.5%, Hgb 9.2 gms%, white count 44,500, 83 neutrophiles, 13 stabs, and 2 lymphocytes. The patient was awake around 6:45 p.m. Her blood pressure was 120/70 mm Hg. Her pulse was 116/min and respirations 24/min. She voided 500 ml of clear urine at 7:25 p.m. There was just a small amount of staining on the dressing at 7:25 p.m. Her blood pressure was 124/70 mm Hg, pulse 120/min, and respirations 24/min. She was taken to her room. She had received 1,250 ml of blood during surgery and 1,000 ml of D5W in the recovery room. She received another 500 ml of blood on the floor at 7:35 p.m., and her blood pressure was 130/70. She received 50 mg of Demerol at 8:15 p.m.

The blood was absorbed at 10:00 p.m., and another unit of blood was added. She complained of pain, at 10:30 p.m., in the operative area, and she received 75 mg of Demerol at 11:35 p.m. IV Keflin was given at midnight. She had another 75 mg of Demerol at 4:30 a.m., 1/7/70. The blood was absorbed and other fluids were connected to the angiocath to keep it open. At 8:00 a.m., her face was described as somewhat discolored or swollen. She had 75 mg of Demerol IM at 9:50 a.m. She ambulated with help at 11:30 a.m. Her color improved. She complained of pain again, and had 75 mg of Demerol at 2:00 p.m. Another 1,000 ml of D5W was added at 2:00 p.m.

At 2:30 p.m., she appeared somewhat cyanotic. She sat up in bed, and Bennett respirator therapy was administered and an arterial puncture was done by a pulmonary studies consultant. She voided 200 ml at 3:30 p.m., and a second arterial puncture was done at 3:50 p.m. She was catheterized for 300 ml at 4:15 p.m. A third arterial puncture was done at 4:50 p.m. She complained of headache. Arterial oxygen tension was 32 mm Hg resting (normal value greater than 80 mm Hg). Normal arterial CO_2 tension is less than 45 mm Hg. Arterial blood was pH 7.445 (normal is 7.35 to 7.45). She was receiving 8 liters of oxygen per minute nasally, and had severe hypoxia at this time and mild hypercapnia. The second arterial oxygen tension was 31.6 mm Hg. CO_2 tension was 46.7 mm Hg and the pH 7.44. The third oxygen tension was 26.5 mm Hg, CO_2 46.0 mm Hg, and pH 7.405.

Her surgeon saw her at 5:00 p.m. with the thoracic consultant. She was encouraged to cough and try to breathe deeply. She was suctioned, and very little mucus was obtained. She was transferred to ICU by the anesthesiologist and maintained on a

Bennett respirator. Her color was purplish pink at 7:15 p.m., following the tracheostomy done at 6:15 p.m. She was coughing some and required constant suction. Her condition was described as poor. IV fluids were running. She received 8 mg of Morphine at 7:45 p.m. Her urine output was 1,800 ml. An EKG was obtained. She was unable to breathe without the Bennett respirator. Blood pressure was 110/60 mm Hg. Her pulse 140/min. A portable chest x-ray revealed alveolar infiltration in the lower portion of both lungs, consistent with pulmonary edema. Alternate possibilities were multiple micro-emboli or sensitivity reaction.

The EKG revealed sinus tachycardia with right ventricular strain. At 10:30 p.m., she seemed a little less apprehensive and was sleeping briefly. However, her condition was described as critical; her blood pressure was 110/60 mm Hg and her pulse 140/min.

On 1/8/70, she still required tracheal suction. A moderate amount of pink, frothy liquid was obtained; and she responded, but still remained cyanotic. Her respirations decreased; and at 1:30 a.m., code 300 was called. She was defibrillated. Sodium Bicarbonate 5 ampules were used. Two ampules of Adrenalin and one of Isuprel were given intra-arterially. She was pronounced dead at 2:00 a.m., 1/8/70.

An autopsy was obtained. Microscopic examination of multiple sections of the lungs revealed extensive pulmonary edema with alveoli distended with pink fluid. There appeared to be an early, generalized pneumonitis with exudation of neutrophiles into the alveolar spaces and early broncho-pneumonia with neutrophiles present in all the bronchiolar ducts. Numerous pneumocytes were present in the alveolar spaces and the capillaries were markedly congested and fibrin thrombi were present.

Final Anatomic Diagnosis:

1. Clinical findings of ectopic pregnancy of the right Fallopian tube, peritoneal hemorrhage, shock, fever up to 103° and 104° terminally, and pulmonary edema.
2. Necrosis and acute inflammation of the ectopic pregnancy wound.
3. Bilateral pulmonary edema, severe.
4. Focal pericarditis of the atria.
5. Bronchopneumonia, slight.
6. Hydrothorax, moderate.
7. Congestive hepatomegaly and splenomegaly, moderate.

Additional Findings:

Hemoperitoneum, slight.
Involuting decidual reaction of the endometrium.
Involuting corpus luteum of the ovary.
Acute congestive cystitis, slight.
Fibrin thrombi of the pulmonary arteries.

The Committee classified this maternal death as direct obstetrical with preventable factors. The history with which this patient presented at 9:35 a.m. on 1/6/70 is almost classic for ectopic pregnancy. Had a culdocentesis been done in the emergency room or shortly after admission, the diagnosis could have been established positively and therapy instituted more quickly. However, there was considerable delay and the patient was not taken to the operating room until approximately seven hours after admission to the hospital. With the admitting diagnosis of acute appendicitis, rule out ruptured ectopic pregnancy, this delay is inexcusable. It was very difficult for the Committee to estimate the total amount of fluid intake given. However, it does seem to have been excessive. The patient died of acute left and right heart failure secondary to excessive administration of intravenous fluids. The treatment of heart failure was not adequate since digitalis and diuretics were not used. The total amount of blood given apparently was correct for the loss determined at the time of operation. However, the dextrose and water and Lactated Ringer's solution given was excessive. The patient developed bronchopneumonia as a terminal event and succumed. The operating surgeon apparently did not see the patient for 24 hours postoperation; this also is too long a delay. In summary, more prompt diagnosis and surgical treatment, followed by more careful administration of intravenous fluids, could have saved this young lady's life.

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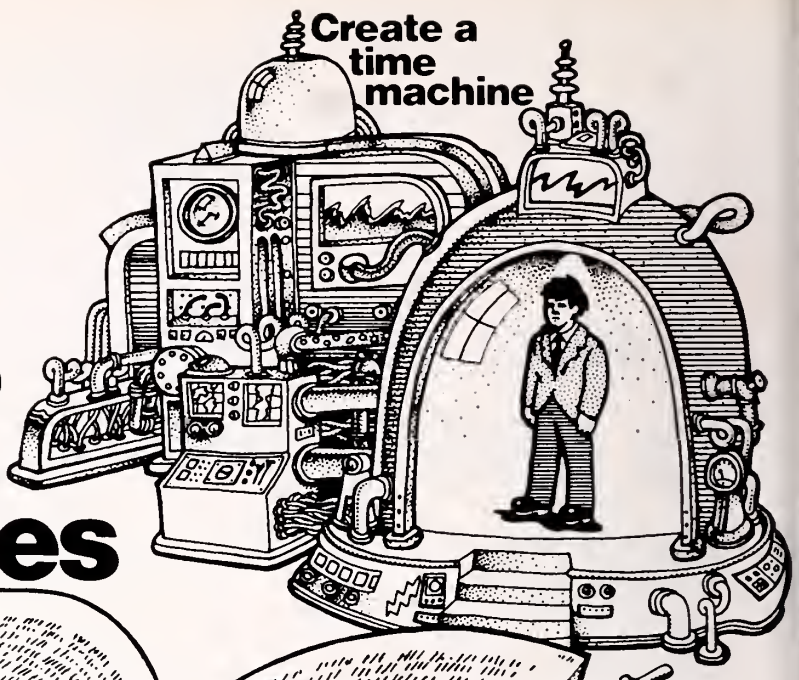
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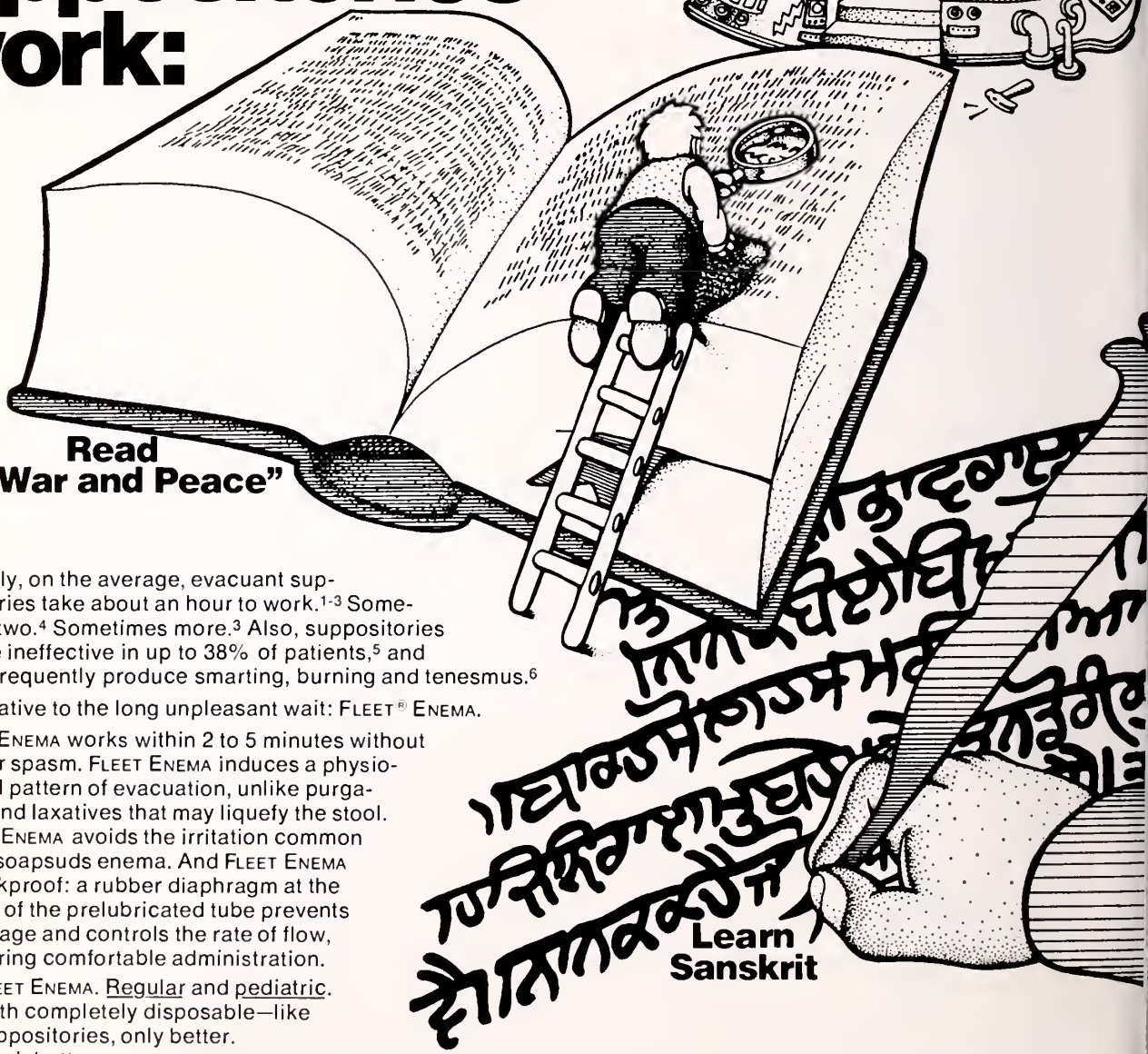
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References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

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Choledochal Cyst

N. PARKE DAVIS, M.D.,* AND ROBERT P. BELIN, M.D.*

Lexington, Kentucky

The etiology and ideal surgical procedure for choledochal cyst remain unknown. Most pediatric surgeons, at the present time, prefer a cyst-enteric drainage procedure. The importance of early diagnosis and treatment prior to irreparable liver damage is emphasized.

DOUGLAS,[1] in 1852, reported the first case of choledochal cyst; and since, more than 600 additional cases have been published. Although the condition is not rare, its uncommon occurrence and necessity for long term follow-up has prevented any individual definite evidence for the superiority of one mode of surgical correction. Further accumulation of cases and follow-up experience are necessary to establish the ideal form of therapy.

Case Report

A three-year-old Filipino male living in the U.S.A. for the last two years was well until four weeks prior to admission, when he developed right upper quadrant pain, nausea, and vomiting. Over the next three weeks the stools became clay-colored and the sclerae, icteric. On admission, physical examination revealed an enlarged liver 5 cm below the right costal margin and a palpable mass below the liver and to the right of the umbilicus. Chest x-ray and IVP were normal, and an upper gastro-intestinal series showed extrinsic pressure on the "c" loop of the duodenum.

The hemoglobin was 9.3 gm%, WBC 13,200 cell/cc, alkaline phosphatase 48.0, BLB units, SGOT 172, SGPT 96, total bilirubin 5.4 mg% with 4.0 mg% conjugated. The test for Australian antibody was negative. A 12-hour collection for VMA was 1.0 mgm (normal). A liver scan using Rose Bengal showed 60 percent retention, indicating mild hepatocellular dysfunction. There was no gallbladder uptake and no filling in the area of the mass.

At operation, there was indeed a large cystic dilation of the supraduodenal portion of the bile duct extending proximal to include the cystic duct. Catheter decompression through the gallbladder fundus, followed by an operative cholangiogram, confirmed the diagnosis (Figure 1). An anastomosis was performed



FIGURE 1 Cholecyto-cholangiogram performed at surgery. Note cyst with overlying gallbladder and proximal dilated biliary ducts. Cyst measured 10 cm in diameter with a 4 mm wall.

**From the Division of Pediatric Surgery, Department of Surgery, University of Kentucky College of Medicine, Lexington, Kentucky 40506*

between the first portion of duodenum and the adjacent cyst. The bile was cultured and a liver biopsy obtained. Subsequently, the bile proved sterile and biopsy revealed mild pericholangitis and bile stasis. The cyst wall histologically demonstrated mild inflammation and a thick muscular layer.

The postoperative course was uneventful. The liver function studies returned to normal and a catheter cholecystogram one week postoperatively demonstrated filling, patency, and drainage.

Discussion

This patient presented with the "classic triad" of *pain, jaundice,* and *an abdominal mass.* Both clinically and histologically, the early adverse sequelae of obstruction by the choledochal cyst were evident, but fortunately were brought to medical attention after a single episode. Untreated cases have progressed to cyst rupture,[2] cirrhosis, or portal hypertension. Even though treated, some cases subsequently develop malignancy or stone formation. In the United States, the female/male predominance is 3:1; in the Asian race, this does not apply.

According to the anatomical classification of choledochal cysts by Alonzo-Lej,[3] this case represents the most common form, Type I, with diffuse cystic dilation of the distal portion of the common duct. Much less common is Type II, with the cyst on a stalk from the common bile duct; or Type III, with dilatation of the introduodenal portion of the duct.

The ideal surgical procedure is still debated. Recently published types of drainage procedures are as follows: 1) anastamosis of the most dependent portion of the cyst to the duodenum, 2) dependent cyst anastamosis to jejunum in a Roux-en-Y fashion, and 3) excision of the cyst and Roux-en-Y choledochojejunostomy reconstruction.

Hayes[4] stated a preference for the use of cyst anastomosis to the jejunum; however, all patients so treated developed complications that required further surgery. Lindenauer[5] managed seven of eight cases by cyst-duodenal anastomosis as the primary surgical procedure; and four of these seven patients were well at greater than 12-year follow-up. Three patients required repeat operations and received cyst-jejunal anastomoses. In 1959, Alonzo-Lej stated a preference for excision of the cyst and choledochoduodenal anastomosis, but recognizes that this carries a higher mortality. A more recent publication by Jones[6] also advocates cyst resection, but provides drainage by a Roux-en-Y choledochojejunostomy. Although all five cases reported by Jones apparently did well, the pancreatic duct was reported not to have been identified at surgery in any instance. At the present time, we prefer the choledochocystduodenostomy. It is the simplest procedure, results are comparable to the others, and it does not preclude any other procedure in the future.

Perhaps, knowledge of the genesis of a choledochal cyst would assist in defining a correct surgical approach, but the etiology remains unknown. One theory implicates abnormal cell proliferation during fetal development that leads to an enlarged lumen, which is then further dilated by normal ductal pressures according to La Place's law. An alternative concept is that the enlarged area is actually "normal," but that the distal duct has "autonomic neurodysplasia" and the condition being dealt with by excision of the cyst is actually a megalocholedochus.

References

1. Douglas, A. H.: Case of Dilatation of the Common Bile Duct. *Monthly J. M. Sc.* (London) 14:97, 1852.
2. Saunders, P. Jackson, B. T.: Rupture of Choledochus Cyst in Pregnancy. *Brit. Med. J.* 3:573-4, 1969.
3. Alonso-Lej, F., Rever, W. B., Pessagno, D.: Congenital Choledochal Cyst, with a report of 2 and an analysis of 94 cases. *SGO* 108:1-30 (Int. Abstr. Surg.), 1959.
4. Hayes, D. M., Goodman, G. N., Snyder, W. H., Woolley, M. M.: Congenital Cystic Dilatation of the Common Duct. *Arch. Surg.* 98:457-61 April, 1969.
5. Lindenauer, S. M., Lavonway, J. M.: Surgical Management of Congenital Choledochal Syst. *Surgery* 65:972-7, June, 1969.
6. Jones, P. G., Smith, E. D., Clarke, A. M., Kent, M.: Choledochal Cysts: Experience With Radical Excision. *J. Ped. Surg.* 6:112-120, 1971.

Trichobezoar

William M. Savage, M.D., F.A.C.S.,* and Octavius E. Inglesias, M.D.**

A report of one case of small intestine obstruction due to trichobezoar and a review of the literature is presented.

BEZOAR is a rare cause of intestinal obstruction. A detailed clinical history will help in the early diagnosis and adequate therapy. The senior author was confronted with such a problem, and we believe that the case should be reported.

Review of the Literature

Gastrointestional obstruction due to bezoar is not a frequent emergency problem. Until 1961, a total of 240 cases were reported.[6] An excellent review of the subject was done by DeBakey and Oschner in 1939.

These foreign bodies may include a wide variety of objects: seeds, vegetable fibers, coconut fibers;[1, 8] orange sections;[14, 21] peanuts;[15] peaches, mushrooms, figs, apples, cherries, grapes, macaroni (Ward and McQuaid mentioned by Wee and Bond);[21] shellac;[19, 23] persimmon;[3, 13] rapane;[20] and hair.[24]

When the foreign body consists of hair, it is defined as trichobezoar; when it consists of vegetable fibers, it is called phytobezoar. Persimmon bezoar is defined as diospyrobezoar. The mechanism of formation of diospyrobezoar is explained on the basis that the green persimmon contains important amounts of tannin which, by the action of gastric HCL, is transformed in anhydride form; this is insoluble and forms a sticky mass.[3] Boggs[1] mentions that predisposing causes are bands of adhesions, gastrointestinal atony of the aged, and edentia. Those who swallow foods quickly may develop this complication. Gastric phytobezoar as a complication of narcotic addiction has also been observed.[7]

The individuals with gastric integrity have a tendency to develop pyloric obstruction.[2, 9, 18] Patients with subtotal gastrectomy Billroth II are particularly prone to develop obstruction of the small intestine due to the absence of the pyloric sphincter. Currently, there is an increased number of cases with gastric resection due to peptic ulceration.[2, 14]

Another rare case observation is pyloric obstruction produced by phytobezoar after pyloroplasty and vagotomy.[10, 18] Cases of giant trichobezoar involving the stomach and duodenal bulb have been published.[11]

Obstruction by diospyrobezoar (persimmon) has been treated successfully with papain solution.[13] The proteolytic activity of papain helped in dissolving the obstructing mass. Therefore, it is reasonable that in this case, initial therapy with papain is indicated, followed by surgery if necessary.

Trichobezoar is more frequent in young females (Hurwitz mentioned by Chong and Todd)[16] and in young children with positive histories of emotional disturbances.[17]

Gastric obstruction may simulate an ulcer and may be complicated by perforation and peritonitis.[17] The ulcer may bleed, and anemia may develop.[15, 17, 22] Another complication is edema.[22]

Frostin and Hutchinson[4] reported one case of obstruction in the descending colon. This was a 90-year-old female with previous history of diverticulosis, so it was very possible that the foreign body passed through the ilececal valve and became impacted in the stenotic area of diverticulosis and diverticulitis.

The symptoms include cramping abdominal pain, nausea, vomiting, and fluid and electrolyte imbalance. Frequent gastric ulcerations with the usual complications — hypochromic anemia, perforation, and peritonitis — have been reported. Valberg, *et al*[22] reported two cases of protein-losing enteropathy.

Report of the Case

This acutely ill 17-year-old white female stated that she had been nauseated and suffering from intermittent vomiting during the past several days. She was seen in the Emergency Room at another hospital 48 hours prior

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to present admission, where she was told she was suffering from intestinal flu and was given 2 cc of Trimethobenzamide as an antiemetic, as well as antacid liquid in the form of Maalox and anticholinergics. There was no improvement, so she was brought to the facility by her family for further care; she was admitted through the Emergency Room under a diagnosis of possible intestinal obstruction, cause unknown. She stated that she usually became nauseated after eating and alternately felt hot and cold, followed by acute emisis. She had been weak and dizzy, and had lost consciousness upon receiving an injection for her vomiting at another hospital. She drank some warm salt water in an attempt to relieve the extreme intermittent cramps in her stomach, but this increased her nausea and vomiting.

History of Past Illness: The mother of the patient reported the usual childhood diseases. Pneumonia occurred when the patient was a child. An ulcer was diagnosed at the age of nine, and the patient still had occasional ulcer symptoms and took Maalox for relief.

General History: The mother further stated that the patient was an extremely nervous girl, a senior in high school, conscientious about her studies, and a straight "A" student. During her studies, she had a habit of pulling her long hair from the right of her head through her mouth and chewing on it. The possibility of a bezoar was therefore suspected.

Physical Examination: Physical examination revealed a 17-year-old white female in acute abdominal discomfort, moderately dehydrated, and vomiting — B.P. 110/80, pulse 72, respiration 16, temperature 99 degrees. Ears, eyes, mouth, and throat were normal. There was noticeable fraying of the hair from the right temple, and it was much shorter than that on the left side. Chest: no assymetry, normal auscultation. Abdomen: no rigidity, but moderate distension and waves of reverse peristalsis could be seen. Generalized pain was noted on palpation over the entire abdomen, with areas in the epigastrium more painful, extremely so on coughing. Auscultation revealed the usual high tinkling sounds characteristic of intestinal obstruction. No abnormal masses could be palpated. Extremities: normal. Neurological: normal. Mental status reflected apprehension and pain, with concern over her condition. Skin was normal color and temperature.

X-ray Findings: X-ray of the abdomen showed numerous dilated loops of small bowel in the mid-abdomen; and progressive films of the abdomen, erect and recumbent, showed some increase in the degree of small bowel distension, apparently primarily in the upper abdomen and representing dilated jejunum. On the original film, there was an oval-shaped area of increased density with peculiar air pockets within it; this may well represent the definite shadow of the suspect hair ball.

Admitting Diagnosis: Possible intestinal obstruction, cause unknown.

Final Diagnosis: Intestinal obstruction from a bezoar.

Treatment: Exploratory laparotomy on 9-22-70.

Findings on Operations: An intestinal bezoar some four feet below the ligament of Treitz, causing obstruction at this point. Also, a markedly dilated intestine above the bezoar up to six to eight cm and filled with bile-stained, thick yellowish-green fluid, and with the intestinal wall markedly thinned out over the bezoar from pressure and near perforation.



FIGURE 1 Polaroid picture of the soft matted mass of hair causing the intestinal obstruction as described. It measured 7 x 4 x 4 cm in size.

Pathology Report: An irregular, oval, seven cm by four cm by four cm mass of matted hair.

Treatment: Opening of the intestine through a two inch incision in the wall over the bezoar after applying rubber shod clamps above and below the mass and packing thoroughly with

lap packs to prevent contamination from spillage and removal of the bezoar mechanically and the fluid by suction. Closure consisting of # 000 chromic catgut in the mucosa and muscularis layers and # 0000 intestinal silk in the serosal layer.

Postoperative Course: Entirely uneventful aside from an ileus established on the third day and found to be due to a fall in electrolytes in spite of electrolyte administration, with the potassium down to 2.4 m Eq/L with a slight fall in sodium and chloride. This was corrected overnight by appropriate amounts of potassium chloride and sodium chloride, and normal peristalsis resumed.

Date of Discharge: 10-3-70, after removal of stitches.

Condition on Discharge: Excellent, patient able to be up and about, taking food. She was instructed to return to the office in one week for further postoperative care, and was referred for a psychiatric consultation.



FIGURE 2 Polaroid of the x-ray picture of the bezoar immediately after removal. This was used for comparison with the diagnostic shadow seen on the original flat plate of the abdomen and found to be identical.

References

1. Boggs, J. E., Eaton, J. P., and Jarrett, J. T.: *West Virginia Med. J.*, May, 1960, Vol. 56, No. 5, 170-71.
2. Chun, J. Y., Dinan, J.J.: *Can. J. of Surg.*, July, 1965, Vol. 8, 272-74.
3. Delia, C. W., Conway, S. C.: *Arch of Surg.*, Vol. 82, April, 1961, 579-83.
4. Frostin, M. H., Hutcheson, M.D.: *The American Surgeon*, Jan., 1967, Vol. 33, No. 6.
5. Herschman, Alan.: *Ann Radiology* 92:1307-8, May, 1969.
6. Indra, K. J., Chawla, S. J.: *Can. Association Rad.*, Vol. XV, Dec., 1964, 193-94.
7. Kaden, W. S.: *JAMA*, September 1, 1969, Vol. 209, No. 9, 1967.
8. Wee, G. C., Bond, L. F., Calman, C. H.: *Miss. Med.*, May, 1963, Vol. 60, No. 5, 437-39.
9. McCabe, R., Knox, W. G.: *Arch. Surg.*, 264-66.
10. Moseley, R. V.: *Arch. Surg.*, Vol. 94, February, 1967, 290-91.
11. Small, A., Muehlbauer, M., Kleinhaus, S.: *The American J. Gastroent. 50*:297-302, October, 1968.
12. Nelson, S. W., Christoforides, A. J., Roenigk, W. K.: *Surg.*, Vol. 109:546-59, May, 1965.
13. Pollard, H. D., Block, G. E.: *The American Journal of Surgeons*, Dec., 1968, Vol. 116, 933-36.
14. Riegel, N.: *The American Surgeon*, June, 1966, No. 6, Vol. 32, 407-09.
15. Robinson, F. W.: *The American Surgeon*, June, 1966, No. 6, Vol. 32, 405-06.
16. Sang Chong, Park, Todd, S. J.: *The Journal of the Medical Society, New Jersey*, Vol. 63:17-20, January, 1966.
17. Sewell, I. R., Spencer, R. R.: *NA. Journal Surgeons*, Vol. 38, No. 1, August, 1968, 19-70.
18. Sparberg, M., Nielson, A., Andruczac, R.: *American J. Dig.*, Dis. Vol. 13, No. 6, 579-83.
19. Valtonen, E. J.: *Med. Exp. Fenn.*, 1965:13, 179-81.
20. Valtonen, K. J.: *Arch. Surg.*, Vol. 98:717-19, June, 1969.
21. Wee, G. C., Bond, L. F., Calman, C. H.: *Missouri Medical*, May, 1963, Vol. 60, No. 5, 437-39.
22. Valberg, L. S., McCorriston, Partington, M. W.: *Canada Med. Association Journal*, February 19, 1966, Vol. 94, 388-91.
23. Valtonen, E.: *Acta Chir. Scand 129*:567-572, 1965.
24. Bertram, H. G., Rosebud, S. D., Freimark: *Am. J. Dis. Child*, Vol. 110, August, 1965, 215-17.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations, with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Medical Progress

A Pragmatic and Operational Approach To the Treatment and Management of Alcohol Addiction

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A working hypothesis is presented for the understanding and treatment of alcohol addiction. It is postulated that addiction per se is a histophysiological phenomenon that occurs at the cellular level and is basically an adaptation to stress.

ALCOHOL addiction[1] or sedativism[2] is in its simple and final analysis a state of acute or chronic systemic poisoning that serves no therapeutic purpose. A realistic and meaningful treatment program must take into account these aspects of the illness and provide treatment for the immediate, intermediate, and remote long-term rehabilitative support of the patient. These three phases may be thought of as: 1) detoxication, seven to fourteen days; 2) physiologic restoration or adequate "drying out," twenty-one to one hundred and twenty days; and 3) a remote convalescence of approximately thirty months. Thereafter, for the majority of the alcoholism patients, there is a continuing need for supportive help from Alcoholics Anonymous and/or a therapeutic alliance with a clinic or therapist.

Alcoholism Defined

"Alcoholism is regarded as a type of drug dependence of pathological extent and pattern, which ordinarily interferes seriously with the patient's total health and his environment."[3]

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, second edition, defines alcohol addiction: "This conditon should be diagnosed when there is direct or strong presumptive evidence that the patient is dependent on alcohol. If available, the best direct evidence of such dependence is the appearance of withdrawal symptoms. The inability of the patient to go one day without drinking is presumptive evidence. When heavy drinking continues for three months or more, it is reasonable to presume addiction to alcohol has been established."[1]

Developmental Etiology of the Addictive Process

The following operational hypothesis is presented to simplify our understanding of the development of addiction to any sedative or tranquilizing substance. Normal stress and the tension of living activates the pituitary-adrenal axis to generate substances that act as tissue tranquilizers. Selye has studied and published since the early 1930's the human organism's ability to adapt to acute and to chronic stress.

These hormonal substances permit the cells and tissues of the body to ignore certain levels of fatigue and to operate at a higher level of tolerance. Goodwin, at the Washington University School of Medicine, has demonstrated the ability of certain individuals to develop a tolerance to alcohol.[2] This tolerance remains and persists after discontinuation or withdrawal of the alcohol. The tolerance may diminish following a long period of abstinence, but will increase to its original level after a few days drinking.

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Once the process of tranquilization has been established, the person enjoys a state of improved well-being and function. Each increase of stress that persists over any appreciable length of time activates the body to produce more of the tissue tranquilizing substances. The person is once again comfortable and goes about his daily life. This state of relative or apparent comfort persists until the stress diminishes. Often times, at this point, the person finds himself at a loss. He is bereft of the stimulation of his problem. All is going well. No aggravations plague him. He finds himself restless, "depressed," ill at ease, and often compulsively goes about "stirring up trouble." He increases his work-load and, as a consequence, restores the level of inner tension he has learned to live with. In short, he has become *addicted* to the endogenous tissue tranquilizers.

Thus, we can now define a state of endogenous cellular addiction tolerant to and dependent upon hormonal substances produced by the pituitary-adrenal axis. In turn, from this point in time, a certain level of excitement, tension, and stress must be sustained and perpetuated in order that production of the adaptational substances be maintained. There is now the appearance of a histophysiological cellular demand that is dependent upon the psycho-social behavior of the individual. Any interruption of the stressful activity precipitates the withdrawal symptoms or abstinence syndrome previously described.

Assuming that the hypothetical state of histophysiological cellular addiction is valid and that it constitutes an underlying basis for compulsive behavior and activity, there comes a point in the resilience of the individual where the mechanisms of production of these substances begin to tire and in some instances become exhausted.

The person here finds the need for exogenous sedative, tranquilizing or stimulating substances to restore a level of comfort. He usually begins to seek an easily obtainable, socially acceptable, and effective substitute to alleviate the anxiety that results as a spin-off of this malfunctioning stress adaptional mechanism. For a great number of these harassed people the choice is an alcoholic beverage.

Comfort is restored. The alcohol fits neatly into the patient's ongoing addiction pattern. The process of self-medication in the lives of 15 to 20 percent of the persons who drink proceeds step by step from increased and steady to excessive comsumption of alcohol and to its eventual destructive personal, physical, and psycho-social consequences.

Oates, in his *Confessions of a Workaholic,* draws a vivid picture of the compulsive behavior patterns which may or may not end in the substitution of any of a great number of methods to achieve a sense of apparent inner balance.[5] In turn, the words of Gibson assume broader meaning in light of the above comments, "I have alcoholism. I was in training for a profession when the clinical symptoms of this disease began to appear. I became an alcoholic, then I became a 'professional alcoholic'."[6] In his paper, he demonstrates that in the years previous to the onset of the illness he could have easily said, "I was in training for alcoholism, i.e., to be an alcoholic, before the clinical symptoms began to appear."

Psychodynamics of Alcoholism

Operationally, alcoholism or sedativism may well be considered as an adaptational behavioral pattern to psycho-social stress and its short- and long-term consequences. The individual needs help to meet the demands of a given *inner or outer* situation. The substance is used to *turn off the misery,* so to speak. Alcohol addiction is currently listed under the heading of Section V, Personality Disorders and Certain Other Non-psychotic Mental Disorders.[1]

First hand data of premorbid psychological and psychiatric examination and testing is hard to come by. Data available to the writer was for the most part derived after the fact and is almost wholly descriptive and retrospective. Regardless of how thorough our analysis of a given person may be, we can only speculate what his actual premorbid personality structure might have been. We make educated guesses based on statistical studies.[7] Therefore, any statement that defines the psychodynamics of alcoholism, is for the most part, a description of the current state and behavior of a poisoned person responding the histophysiological demands of an addictive process that was established long before the introduction of the

sedative, narcotizing, or tranquilizing substance.

We may find an analogy between the histophysiological addiction syndrome and the mid-life involutional depressive reactions, or to be more exact, Involutional Melancholia, which is defined: "This is a disorder occurring in the involutional period and characterized by worry, anxiety agitation, and severe insomnia. Feelings of guilt and somatic preoccupations are frequently present and may be of delusional proportions."[1] This is descriptive of the alcoholism patient in the crucial phase of the progression of the illness prior to the onset of the compulsive, uncontrolled drinking stages of chronic alcoholism.

Objectives of a Realistic Treatment Program

A realistic treatment program could be oriented toward the development of a concept of medical practice that aims at keeping the patient with these chronic stress related disorders functional and productive. It should anticipate the destructive processes of the illness, e.g., marital disruption, occupational failure, various forms of compulsive, addictive behavior, and general adaption syndrome decompensation, as well as social disintegration. It would provide a series of facilities capable of interdicting the stress burdened persons before the pathological processes have become evident and before they have made him dysfunctional and non-productive. Ideally, this interdiction needs take place before the person has become visibly ill and before he and the significant persons in his socio-economic network are forced into perceiving him as a casualty.

How to Recognize an Alcoholic

Alcoholism should be suspected if there is:

1. Increasing consumption of alcohol, whether on a regular or sporadic basis, with frequent and perhaps unintended episodes of intoxication;

2. Drinking as a means of handling problems or relieving symptoms;

3. The expressed need to have a drink, especially if habitually repeated;

4. Tendency toward making alibis and weak excuses for drinking;

5. Frequent absenteeism from the job, especially if occurring in a pattern such as following weekends and holidays;

6. Persistent marital and family problems, perhaps with multiple marriage;

7. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education, and background.[3]

How to Treat the Alcoholic

The physician's initial contact with the alcoholism patient may result from the patient's presenting himself with vague somatic complaints without apparent cause, particularly those of insomnia, gastro-intestinal difficulties, headaches and/or anorexia. If the physician cannot find a clinically physical or physiological basis for the complaints, he should explore by careful history the seven diagnostic clues previously listed.

With reasonable assurance of the presumptive evidence described in the definition of alcohol addiction and the patient's affirmative attitude and willingness to give information and to accept help, or the patient's obvious evasive discomfort and denial that there is anything wrong with his basic drinking patterns when the subject of alcohol abuse is introduced, the physician may assume that a confrontation is in order.

In the event the patient acknowledges and accepts the diagnosis of alcoholism, the ensuing course of treatment will be dependent upon whether or not he is drinking or abstinent at the time of the initial contact.

If the person is abstinent and his illness is in remission, outpatient or office treatment is indicated. The initial workup should include a very careful dietary history as well as an investigation of his drinking pattern. Recent research indicates that adequate diet, i.e., a good and balanced breakfast, supplemented with vitamins and minerals, may be greatly beneficial in helping divert people away from becoming chronic alcoholics. Animal experiences at Loma Linda University demonstrated that animals on improper diets when given a choice between water and ten percent alcohol to drink, consumed at least five times as much alcohol as did the control group on a nutritionally adequate diet. The research team also found

that those animals that drank large quantities of alcohol when placed on a good quality diet decreased their consumption of alcohol.

Management and Immediate Rehabilitation

A. Physician's Attitudes

The physician's attitude toward the presenting alcoholism patient should be the same as that toward an acutely or chronically poisoned person. Hence, detoxication is in order. A medical emergency exists. The physician is dealing with a physical illness that involves every organ system.

Initial phases of treatment may be carried out in the physician's office or in the medical wards of a general medical service hospital.[9] It is to be noted that the acute alcoholism patient in the greater number of instances is easily treated, is quiet and ordinarily less trouble nursing-wise than the average medical or surgical patient.

After detoxication is completed and physiological balance is attained, the physician may consider and make referral to Alcoholics' Anonymous, the psychiatrist, or to the comprehensive mental health center for psyehotherapy and/or alcoholism counseling.

From the beginning, liaison should be maintained with the patient's employer, and plans for the patients early return to work should be initiated at the beginning of treatment. In the following suggested outline of a treatment plan, the patient should be encouraged to sustain a concerted effort for at least two and one-half years. Following this, a lifetime of helping others less fortunate than himself, should be set as an avocational goal.

The treatment outline is divided into outpatient, office and inpatient phases and procedures. It is as follows:

B. Office Procedure (the non-acute, abstinent patient)

1. History and physical
2. Laboratory studies
 a. Hematology
 b. Liver battery
 c. SMA 16
3. Electrocardiogram
4. Contact with Alcoholics' Anonymous and a regular program of meetings
5. Initiation of sessions designed to educate the patient and his family regarding the actual management of the illness and the necessity of abstinence
6. Dietary management of the patient
7. Regular and frequent contacts with the physician, or referral to the comprehensive mental health center for alcoholism counseling services
8. Antabuse may be optional and individualized

C. Office Proeedure (the acute patient and interruption of the drinking cycle)

1. History and physical examination
2. Inpatient hospital detoxication (if the patient is sufficiently motivated, he may be managed at home)
3. Determination of the intoxicating agent and/or drug cross reaction
4. Same as above

D. Inpatient Treatment

1. Detoxication
 a. History and physical
 b. Diet as tolerated
 c. Chest x-ray, Electrocardiogram, SMA-16, routine laboratory,
 d. (Hydroxyzine hydrochloride) Atarax, 50 mgms. i.m., q. 2-3 hrs. p.r.n.
 e. (Hydroxyzinc hydrochloride) Atarax, 50 mgms. p.o., q.i.d.
 f. (Chlordiazepoxide hydrochloride) Librium may be substituted for hydroxyzine hydrochloride*
 g. Mehtaqualone, 300 mgms. h.s. and repeat in 1 hr. if awake
 h. Dilantin, 100 mgms. h.s.
 i. Phenobarbital, 100 mgms., h.s.
 j. Oxane, 1.0 ounce a.c. (if history is negative for peptic ulcers)*

Once the patient is detoxicated and restored to reasonable electrolyte balance, attention must be paid to restoration of his general physical condition. The physician must keep in mind that poisoning with alcohol insults and damages multiple organs and organ systems throughout the body. Hardly a tissue is unaffected by the chronic poisoning. Therefore, close observation and therapeutic surveillance of the patient must be maintained past several critical points.

**Oxane contains an anesthetic, and caution should be exercised to avoid possible perforation.*

At the end of the third or fourth month, the general physiology has been restored and the patient often experiences a sense of well being and often over-confidence. In truth, the general stress and tension of recovery has lessened and the compulsive aspects of his endogenous addiction begin to surface. Here the patient may drink to restore some balance to the histophysiological stress.

Again at the end of the seventh to the ninth month, the central nervous system begins to restore the finer adjustments of its neural circuitry. However, abnormal reflexes may be found, for instance the "cold pressor test" may be out of normal limits.

Therapeutic help and rehabilitative support is necessary for at least thirty months, since much of the pathologically conditioned behavior is retained at least this long, and may be activated by another round of drinking.

A good rule of thumb to follow is to remember and observe the patient therapeutically at intervals of three-six-nine months, and sustain fairly regular contacts for the remainder of the thirty-month period.

Once the thirtieth month is past, the patient may well need assistance at critical periods of the year, such as significant anniversaries, holidays, and cyclic fluctuations of his or her endocrine cycles, or periods of obvious psychological and physical stress. As time goes on, the psychological and psycho-dynamic aspects of the illness becomes more and more apparent and should be handled by skilled counseling and, if necessary, by psychotherapy.

Conclusions and Recommendations

1. The addictive process or addiction *per se* is a non-specific histo-physiological or cellular dependence on hormonal tissue tranquilizers produced by the several organs associated with the pituitary adrenal axis as part of the general adaptation syndrome in response to persistent stress.

2. Alcohol, narcotics, addicting sedatives, and tranquilizers are only substitutive adjuncts to the underlying addictive process.

3. Clinical experience demonstrates that often times a given patient may go the "route" of alcohol, pills, narcotics, and back again.

4. Alcohol addiction or sedativism may be treated as a medical illness in a general medical surgical hospital.

5. Counseling, psychotherapy, Alcoholics' Anonymous support, as well as industrial liaison and family involvement, are supportive adjuncts in the rehabilitation of the patient.

6. A realistic treatment program should include all these resources and should cover a period of approximately thirty months.

References

1. APA: *Diagnostic and Statistical Manual.* See Edition 1968, p. 45 and p. 36.
2. Gitlow, S. E.: *Recovery.* Vol. 4, No. 4, 1970.
3. AMA: *Manual on Alcoholism.* 1968, p. 5.
4. Selye, Hans: *The Stress of Life.* N.Y., McGraw-Hill, 1956.
5. Oates, Wayne E.: *Confessions of a Workaholic.* N.Y., World Publishers, 1971.
6. Gibson, Jos. J.: Keynote address, "An Alcoholic Professional," Interagency Workshop on Alcoholism, Family Services in Cincinnati. Unpublished, September 11, 1971.
7. Barry, Herbert: "Youngest Son is More Prone to Alcoholism," *Louisville Times,* Louisville, Kentucky, June 4, 1971.
8. UD Register, Science News. October 23, 1971, Vol. 100, No. 17, p. 281.
9. "The Forgotten Health Problem," Report of the Committee on Services to The Alcoholic and His Family, to the Health and Welfare Council of Louisville and Jefferson County. Louisville, Kentucky, March 1, 1971, p. 4.

SPECIAL ARTICLES

Usual, Customary, and Reasonable

EDITOR'S NOTE In implementing the actions taken by the 1971 KMA House of Delegates, the members of the Executive Committee have requested this special article be printed in The Journal. It is the interpretation being made of Resolution H, introduced by the Nelson County Medical Society, entitled "Third Party Payment Plans."

THE Executive Committee of the Kentucky Medical Association met on October 28 to interpret and implement the actions taken by KMA during its annual session in late September.

One of the actions taken by the House of Delegates which has apparently been misinterpreted by the press and others was a resolution concerning third party payment plans. The resolution states: 1) that the Kentucky Medical Association not only urge all third party carriers, but use every means at its disposal to bring about an equitable payment plan for all doctors in the state, and 2) that such a plan be based on service and not on geographical or economic location.

The House of Delegates, in an affirmative vote, approved the resolution which, in effect, reaffirms a long-standing policy of the KMA as relates to third party payers.

It is the policy of the Kentucky Medical Association that the most equitable payment plan for doctors' services in Kentucky is the Usual, Customary, and Reasonable concept, which bases payment by third parties on physicians' charges for services rendered.

The KMA believes the physician has the right to charge his fee for the service he renders and should be reimbursed within the Usual, Customary, and Reasonable concept. The House of Delegates went on record endorsing "Usual and Customary" at its annual session in 1967, and has reaffirmed this position on numerous occasions since that time.

The concept, as approved by KMA, defines Usual, Customary, and Reasonable as follows:
Usual: The "usual" fee is that fee usually charged for a given service by an individual physician to his private patient (i.e., his own usual fee).

Customary: A fee is "customary" when it is within the range of usual fees charged by physicians of similar training and experience, for the same service within the same specific and limited geographical area (socio-economic areas of a metropolitan area or socio-economic area).

Reasonable: A fee is "reasonable" when it meets the definitions for both usual and customary, or in the opinion of the responsible medical association's review committee, is justifiable, considering the special circumstances of the particular case in question.

To assist in the administration of this concept, KMA developed one of the nation's leading peer review mechanisms and at its annual meeting on September 23, 1971, voted to form a Kentucky Foundation for Medical Care, which would have among its objectives:

1) Peer Review, not only of fees, but, more importantly, in the area of quality medical care through the development of norms or standards of medical care in Kentucky and through the careful scrutiny of possible over- and under-utilization.

2) Development of minimum standards of

coverage for health insurance offered to the citizens of this Commonwealth, and use its influence and good offices to see that substandard coverage is upgraded or removed from the market.

3) Advice and encouragement in the development of methods of improving the quality of health care and the better distribution of such care to all citizens, and should work with other allied and interested groups in the area of improvements in the means of financing and providing health care.

4) Freedom of action and purpose as to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain the medical profession's position of leadership in health matters in Kentucky in keeping with current development in the legislative, social, or medical fields. . .

By adopting this resolution, we again urge all third party payment plans to adapt their programs in keeping with KMA's policy as outlined above.

We hope that this action further demonstrates KMA's interest in a fair and equitable payment system for physicians' services, and a concerned effort to provide the public the best possible medical care at the lowest reasonable cost.

Answers to Your Questions About Blue Shield

(Continued from page 914)

VII. Out-patient-Accidental Injuries
All accidental injury claims must contain the date and time of the accident on the claim form. All physical examinations (even when related to and performed within 72 hours of the injury) will not be considered part of the out-patient accident care. Any x-ray and laboratory service rendered with such physical examinations must relate to the injury to be a covered service.

VIII. Mental Health Team—Physician Supervision
Services of psychologists, psychiatric social workers, and/or psychiatric nurses are covered only if the patient has been seen by the attending physician within 60 days of such service.

Q. How may physicians cooperate with Blue Cross and Blue Shield in the administration of these problem areas?

A. *Kentucky Blue Cross and Blue Shield request that physicians become aware of the administrative changes, and the reasons these changes were necessary. The purpose in making these changes is not to reduce benefits, but to assure that the benefits provided are in strict accordance with the terms of the Civil Service Commission contract.*



Thank You

THE *Journal* approaches its sixty-ninth Christmas this month. For all of us, the year past has been an eventful one; we welcome the year-end holiday season as a bit of a respite, and a chance to review our course. We, at *The Journal of the Kentucky Medical Association,* well know how much we are indebted to others for the success of this past year; and take pleasure in acknowledging their contributions herewith.

Many fine scientific articles have been published, including further items in the continuing series entitled "Medical Progress." Our thanks, too, to the scientific editorial consultants; their largely unsung labors of love, in reading and commenting on papers submitted, form a core around which this *Journal* is built.

Several physicians have contributed special articles, some have been regular columnists, and many have helped us along with news items of interest. To all of these doctors we are indebted.

For their very real advice and counsel we extend our appreciation, also, to the administration and faculty of each of the medical schools in Kentucky. They form a base upon which our medical culture, heritage, and education can grow, and they have been consistently helpful and cooperative. For this pleasant relationship we are grateful.

To the companies whose advertising has been presented on these pages, we offer our thanks for their confidence and support. Such support enables us to present, with reasonable economy, the on-going story of Kentucky medicine to its participants — you, the physicians of this State. We appreciate that opportunity.

To all these people — to all involved in any way in the fascinating and complex process of medical care in Kentucky this past year — we say well done. Thank you for your efforts. May your frustrations diminish and your peace of mind increase.

Merry Christmas.

Walter I. Hume, Jr., M.D.

*The Happiest Heart**

John Vance Cheney

Who drives the horses of the sun
Shall lord it but a day;

Better the lowly deed were done,
And kept the humble way.

The rust will find the sword of fame,
The dust will hide the crown;

Ay! none shall nail so high his name
Time will not tear it down.

The happiest heart that ever beat
Was in some quiet breast

That found the common daylight
sweet,

And left to Heaven the rest.

**This tribute is printed in memory of the 45 Kentucky physicians who died during the past year. The following page carries the list.*

Deceased Kentucky Physicians

1971*

Gyrlee Thomas Ballard, Harrodsburg

Hobart D. Belknap, Louisville

Lotte K. Bernstein, Louisville

John S. Chambers, Lexington

Samuel Cooper Clarkson, Lexington

Thomas J. Crice, Louisville

Randolph Dade, Hopkinsville

Paul E. Davis, Jr., Paducah

Irving Lee Denton, Fordsville

Hiram Simm Eggers, Louisville

Robert Howard English, Henderson

Leo R. Evans, Central City

Galen H. Freeman, Bowling Green

S. C. Gibbs, Lawrenceburg

Joseph E. Hamilton, Louisville

Paul Harrison, Corbin

Clarence David Hawkins, Louisville

Earl T. Hays, Jr., Berea

William B. Hilbun, Columbia, S. C.

Carl Clifford Howard, Glasgow

William Ignatius Huesing, Newport

David L. Jones, Fulton

Montford Fulton Kelly, Hindman

Chester R. Lewis, Georgetown

Robert F. Long, Somerset

Addie M. Lyon, Ashland

Ora Hannah Kress Mason, Murray

Charles Grandison McLean, Lexington

Walter A. Mitchell, Louisville

Merle D. Napier, Hopkinsville

Claude Neidhammer, Ashland

Hulbert Viars Noland, Louisville

Joseph Manuel Ray, Huntington, W. Va.

George Hankins Riley, Erlanger

Sidney Roston, Louisville

Delfor Satelo, Louisville

Ernest Cole Strode, Lexington

Jacob Leland Tanner, Henderson

David H. Thurman, Sr., Louisville

David R. Upton, Munfordville

Fred Harry Welte, Jr., Ft. Thomas

Charles A. Wathen, London

Roy E. Wilhoite, Louisville

Hylan Hale Woodson, Eddyville

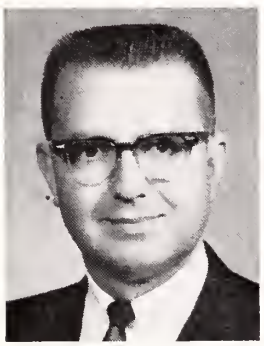
Turner Ashby Woodson, Fairhope, Ala.

**List of names of deceased physicians available to The Journal as of November 10, 1971.*

ORGANIZATION SECTION

KEMPAC Directors Elect Officers For 1971-72

Fred C. Rainey, M.D., Elizabethtown, was elected Chairman of the KEMPAC Board of Directors at the annual meeting of the group, held November 3 in Louisville. Mrs. Hoyt D. Gardner, Louisville, was elected Vice-Chairman, and Cecil L. Grumbles, M.D., Louisville, was chosen Secretary-Treasurer.



Doctor Rainey

Doctor Rainey has represented the Second Congressional District on the KEMPAC Board and has been on the Executive Committee since 1967. He is Immediate Past-Chairman for State Affairs of the KMA Committee on Legislative Activities and is presently a KMA Alternate Delegate to AMA.



Mrs. Gardner



Doctor Grumbles

Mrs. Gardner has been active with KEMPAC and the Woman's Auxiliary to KMA for several years. She has served as one of the Auxiliary's representatives to KEMPAC since 1968 and was President of the Auxiliary in the Associational year of 1969-70.

A Representative to KEMPAC of the Third Congressional District since 1967, Doctor Grumbles has also served for several years on the KMA Committee on Legislative Activities.

Doctors Grise And Polk Elected ACS Governors

Richard F. Grise, M.D., Bowling Green, and Hiram C. Polk, Jr., M.D., Louisville, were among the 26 new members of the Board of Governors of the American College of Surgeons elected at the recent annual Clinical Congress of the College held in Atlantic City, N. J.

Governors act as communication links between the 32,000 Fellows of the College, 79 local chapters, specialty societies, Regents, and ACS headquarters staff.

The American College of Surgeons is a voluntary, scientific, and educational institution organized in 1913 for the sole purpose of improving care of the surgical patient.

Mrs. Raymond Jones Named President Of SMA

Mrs. Raymond E. Jones, Louisville, was installed as President of the Woman's Auxiliary to the Southern Medical Association during the recent meeting of the group held in Miami.

Mrs. Jones has been active in Auxiliary work since 1963. She is a Past-President of the Woman's Auxiliary to the Jefferson County Medical Society and the Woman's Auxiliary to KMA. She has also served as the Southern Regional Chairman of the Home Centered Health Care Committee of the Woman's Auxiliary to AMA.

Health Conference Planned

The 25th National Conference on Rural Health will be held March 16-17 in San Francisco. The theme of the meeting, sponsored by the Council on Rural Health, AMA, will be, "Partnership for Rural Health Care Development."

Merlin K. Duval, Jr., M.D., Assistant Secretary for Health and Scientific Affairs, HEW, will deliver the keynote address, "A Program for Rural Health Development." Other activities planned include a symposium on, "Rural Community Planning for Health Systems Development," workshops, talks by prominent guests, and discussion periods.

The committees and commissions list for the Kentucky Medical Association and the Kentucky Foundation for Medical Care will be published in the January, 1972, *Journal.*

KMA Committee Reports

Committee on Legislative Activities

Hoyt D. Gardner, M.D.,
Louisville, Chairman for National Affairs
William W. Hall, M.D.,
Owensboro, Chairman for State Affairs

KMA Headquarters Office **November 11, 1971**

The KMA Committee on Legislative Activities met on November 11, 1971, with members of the KMA Quick Action Committee. The new Chairman for State Affairs, William W. Hall, M.D., presented to the committee members actions of the 1971 KMA House of Delegates that had been referred to this committee. Much of this was in the form of legislation and is incorporated in a proposed bill which would create a separate Board of Medical Licensure. There were a number of other legislative proposals for the 1972 session of the Kentucky General Assembly that will be presented at the next meeting of the KMA Board of Trustees.

Chairman for National Affairs, Hoyt D. Gardner, M.D., gave a very concise and complete report on the hearings on National Health Insurance being held before the Ways and Means Committee of the House of Representatives. At this time, it is not known when this legislation will be considered by Congress, and it was the Chairman's suggestion that all physicians follow the status of this most important national legislative issue through the weekly issues of the "American Medical News."

Technical Advisory Committee on Physician Services (Title XIX)

William T. Watkins M.D., Somerset, Chairman

KMA Headquarters Office **November 10, 1971**

The Technical Advisory Committee on Physician Services (Title XIX) met for the first time this Associational year on November 10, 1971, with all the members in attendance. The new Chairman, William T. Watkins, M.D., introduced new committee members Richard B. McElvein, M.D., Lexington, and H. Burl Mack, M.D., Pewee Valley.

Guests in attendance included William P. McElwain, M.D., Commissioner of Health; Mr. James Rogers, Director, Division of Medical Assistance of the Department of Health; Mr. Jack Waddell, Director, Division of Medical Assistance of the Department of Economic Security; and Mr. Joe Whitlock, Program Coordinator for Physician Services, Division of Medical Assistance, Department of Health.

The committee reviewed the action taken on the Title XIX Program by the 1971 KMA House of Delegates and received reports from both the Department of Health and the Department of Economic Security of the Kentucky Medical Assistance Program.

Future program plans were discussed, and Doctor Watkins reviewed with the committee members the report he will present to the next meeting of the Advisory Council for Medical Assistance dealing with a summary of KMA peer review activities.

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Foundation Report

Initial Meeting of Incorporators of Kentucky Foundation for Medical Care

KMA Headquarters Office **November 4, 1971**

On November 4, the 15 original incorporators of the Kentucky Foundation for Medical Care held their initial meeting at the KMA Headquarters, and signed the Foundation's Articles of Incorporation.

The following Foundation officers were elected for one-year terms:

President: Henry B. Asman, M.D., Louisville

Vice-President: Marvin A. Bowers, Jr., M.D., Louisville

Secretary: Mr. Robert G. Cox, Louisville

Treasurer: Faull S. Trover, M.D., Madisonville

Several important items were discussed, including the Foundation's initial activities, funding mechanisms and sources, methods for the improvement and delivery of health care, and Internal Revenue Service requirements for tax-exempt status.

Seven Foundation committees were proposed to evaluate and pursue stated objectives and nominations were made for membership appointments to these committees.

It is anticipated that the Internal Revenue Service will require four to six weeks for consideration of the incorporation request.

The next meeting of the Foundation's Board of Directors has been scheduled for Thursday, January 13, 1972.

NEWS ITEMS

J. Vernon Pace, M.D., was elected Director Emeritus of the Board of Directors of Kentucky Blue Shield at the recent annual meeting of the Board. Doctor Pace was one of the founders of Kentucky Blue Shield and served as Chairman of the Board of Directors in 1960.

Paul D. Crary, Jr., M.D., is now practicing in association with Radiology Associates in Covington. Doctor Crary graduated from the St. Louis University School of Medicine, interned at the U.S. Naval Hospital, Great Lakes, and served his residency at the U. S. Naval Hospital in Philadelphia.

John E. Downing, M.D., is now practicing ophthalmology in Bowling Green. He graduated from the University of Louisville School of Medicine; interned at Parkland Memorial Hospital, Dallas, Texas; and served his residency at the U. S. Naval Hospital, Philadelphia, Pa.

Michael B. Flynn, M.D., Louisville, has joined Condict Moore, M.D., and Fitzhugh Mullins, M.D., in practice. A general surgeon, Doctor Flynn is a graduate of the University of Dublin College of Medicine; he interned at Stamford Hospital, Stamford, Conn., and served his residency at the University of Maryland.

Richard K. Jelsma, M.D., has joined Franklin Jelsma, M.D., Lawrence F. Jelsma, M.D., and Paul J. Ross, M.D. in practice in Louisville. A specialist in neurosurgery, Doctor Jelsma graduated from, interned at, and served his residency at Northwestern University.

Maurice E. John, Jr., M.D., an ophthalmologist, has begun practice in Louisville. He graduated from the University of Iowa College of Medicine, interned at Wake Forest, and served his residency at the University of Louisville School of Medicine.

Proceedings Available

The proceedings of the April, 1971, Anglo-American Conference on Medical Care, organized by The Royal Society of Medicine and the Royal Society of Medicine Foundation, Inc., have recently been made available.

The proceedings feature, among others, presentations by Walter C. Bornemeier, M.D., John H. Knowles, M.D., and J. Enoch Powell. A copy is available at the KMA Headquarters Office.

Joseph C. Marshall, Jr., M.D., has joined A. Bert Sparrow, M.D., in practice in Louisville. A general and vascular surgeon, Doctor Marshall graduated from the University of Louisville School of Medicine and interned and served his residency at Louisville General Hospital.

Robert C. Noble, M.D., has joined the faculty of the Department of Medicine, University of Kentucky Medical Center. Doctor Noble specializes in infectious disease. He graduated, interned, and served his residency at Duke University School of Medicine.

Scientific Award Announced

The Medical Society of the State of New York recently announced the opening of competition for the 1972 Albion O. Bernstein, M.D., Award. The national award, $1,500, will be given to a physician, surgeon, or scientist who has made a widely beneficial scientific discovery in medicine, surgery, or prevention of disease.

For further information write: Awards Committee, Medical Society of the State of New York, 420 Lakeville Road, Lake Success, N. Y. 11040.

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In Memoriam

T. ASHBY WOODSON, M.D.
Louisville
1899-1971

T. Ashby Woodson, M.D., a former Louisville physician and hospital administrator, died October 15 in Fairhope, Ala., where he had lived in retirement since 1969. Doctor Woodson, a 1924 graduate of the Columbia University College of Physicians and Surgeons, was head of the Old Wavery Hill Tuberculosis Clinic during the 1940's, and was named chief of the Veterans Administration Tuberculosis Clinic in 1947. He was a Fellow of the American College of Chest Physicians and a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

CHESTER R. LEWIS II, M.D.
Georgetown
1923-1971

Chester R. Lewis II, M.D., a Georgetown family physician for 18 years, died November 8. A native of Middlesboro, Doctor Lewis graduated from the University of Louisville School of Medicine in 1952. He was a member of the Scott County Medical Society and the Kentucky and American Medical Associations.

ALICE M. PICKETT, M.D.
Louisville
1878-1971

Alice M. Pickett, M.D., retired Chairman of the Department of Obstetrics, University of Louisville School of Medicine, died November 17. A native of Finchville, Doctor Pickett graduated from the Women's Medical Center, Philadelphia, in 1909. She was head of the Department of Obstetrics from 1921 to 1946. She helped to establish Kentucky's first prenatal clinic and the Birth Control Clinic of Louisville. Doctor Pickett was a member of the Jefferson County Medical Society and the Kentucky and American Medical Associations.

Before another year passes, an estimated 600 Kentuckians will become blind.

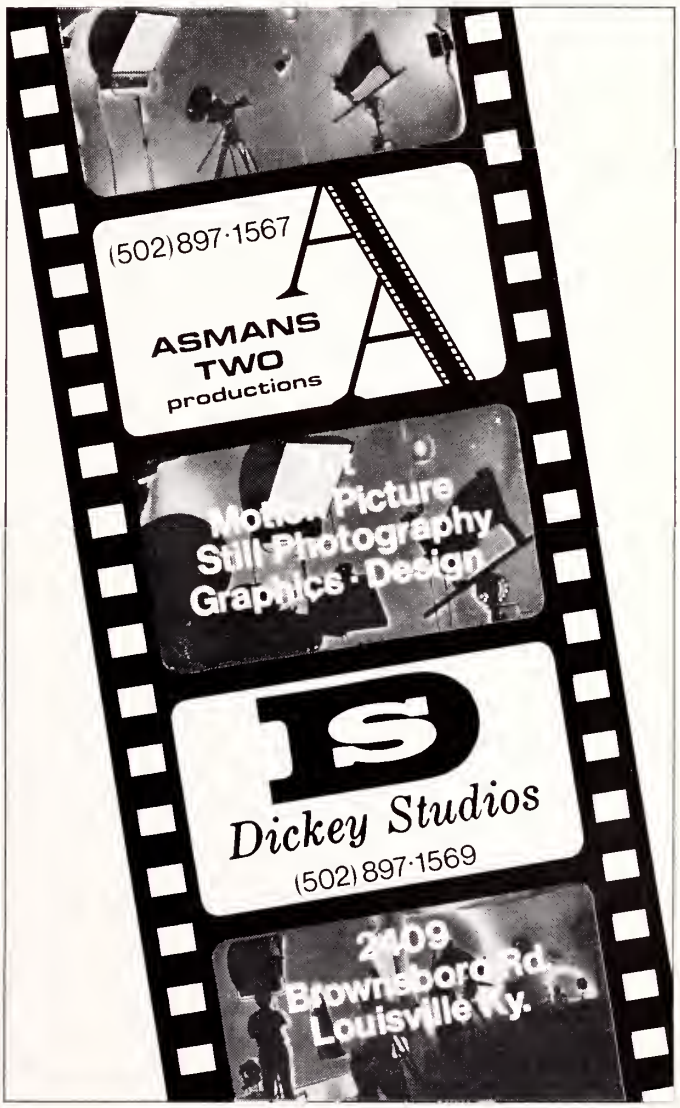
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Continuing Educational Opportunities

From The

KMA Postgraduate Medical Education Office

Educational Program Planned

A postgraduate educational program for practicing physicians is being planned by the medical staff of the Jewish Hospital as a means of providing physicians with an opportunity to keep abreast of some of the changes and new developments in medicine. A three-phase program is being organized — a medical lecture series by physicians at the University of Louisville School of Medicine and Jewish Hospital, an All-Service Conference featuring demonstrations in pathology and radiology, and an annual lectureship program by nationally renowned specialists.

The first lectures in this series are listed on this page, along with other postgraduate educational opportunities.

IN KENTUCKY

DECEMBER

15 Postgraduate course, "Acute Emergencies in Drug Abuse," by Donald M. Thomas, M.D., 6:30 p.m., Jewish Hospital, Louisville

16 Fourteenth Annual Postgraduate Medical Seminar, Norton Memorial Infirmary and Kentucky Chapter, American Academy of Family Physicians, Norton Infirmary, Louisville

17-18 Postgraduate course, "The Practical Ophthalmology of Childhood," University of Kentucky Medical Center. For further information write: Frank R. Lemon, M.D., Associate Dean for Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506

JANUARY

19 Postgraduate course, "Coronary Artery Surgery," by Allan M. Lansing, M.D., 6:30 p.m., Jewish Hospital, Louisville

25 Postgraduate courses, "Common Pediatric Eye Problems," by William C. Edwards, M.D., Associate Professor in Ophthalmology, University of Louisville School of Medicine; "Osteomyelitis Septic Arthritis in Children," by James W. Harkess, M.D., Kosair Professor of Orthopedic Surgery; 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

FEBRUARY

16 Postgraduate course, "Osteoporosis," by James W. Harkess, M.D., 6:30 p.m., Jewish Hospital, Louisville

22 Postgraduate course, "Current Concepts in Practical Neonatology," by Jerry Seligman, M.D., Assistant Professor, Department of Pediatrics, Neonatology, University of Louisville School of Medicine, 7:00 to 9:00 p.m., Children's Hospital Amphitheater, Louisville

IN SURROUNDING STATES

JANUARY

17-19 American College of Surgeons sectional meeting, Miami, Florida

FEBRUARY

14-16 American College of Surgeons sectional meeting, St. Louis, Mo.

23 Postgraduate course, "Learning Disabilities and the Physician," Cleveland Clinic Educational Foundation, Cleveland, Ohio

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their winter and spring meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

The George Beeler Memorial Meeting of The Kentucky Medical Association

Louisville Royal Room, Seelbach Hotel, Louisville, Kentucky, September 21-23, 1971

Digest* of Proceedings of the Regular Sessions of the

HOUSE OF DELEGATES

Richard F. Greathouse, M.D., Louisville

Speaker of the House, Presiding

First Session

Speaker Greathouse called the 121st Meeting of the KMA House of Delegates to order at 9:05 a.m. and asked Paul Parks, M.D., Bowling Green, to give the invocation. He then called on Earl P. Oliver, M.D., Scottsville, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Oliver reported that a quorum was present. A motion was made, seconded, and passed that the minutes of the 1970 session of the House of Delegates be approved as published in the December, 1970, *Journal of the Kentucky Medical Association.*

S. R. Scheen, M.D., Louisville, Secretary, presented the general announcements. He called attention to the scientific sessions beginning at 8:50 a.m. on Tuesday, September 21, at the Convention Center. He emphasized that the highlight of the meeting, the President's Luncheon, would be held on Wednesday in the Flag Room of the Kentucky Hotel and feature Story Musgrave, M.D., America's only physician-astronaut. Doctor Scheen reminded the delegates that the Nominating Committee for general officers would meet at the close of this first session of the House and that the six Reference Committees would convene at 2:00 p.m., Monday, in various rooms of the Seelbach Hotel. To conclude his announcements, Doctor Scheen reminded the delegates to use the Message Center and to visit the technical and scientific exhibits.

Doctor Scheen then read the list of physicians who had died since the 1970 meeting of the House of Delegates, following which the members of the House stood for a moment of silent tribute. The names of these physicians, their locations, and dates of death were given as follows:

Amstutz, Omar Copeland	Irvine	Sept. 30, 1970
Ballard, Gyrlee Thomas	Harrodsburg	Dec. 24, 1970
Belknap, Hobart D.	Louisville	April 2, 1971
Berman, Leonard S.	Maysville	Sept. 30, 1970
Bernstein, Lotte K.	Louisville	Feb. 14, 1971
Boldt, Martin Harold	Louisville	Sept. 18, 1970
Brannon, Horace S.	Covington	Oct. 20, 1970
Clarkson, Samuel Cooper	Lexington	Nov. 30, 1970
Cloyd, Wm. Crenshaw, Jr.	Richmond	Nov. 3, 1970
Crice, Thomas J.	Lexington	July 7, 1971
Cutler, Irwin Herbert	Louisville	Nov. 4, 1970
Dade, Randolph	Hopkinsville	July 7, 1971
Davis, Paul E., Jr.	Paducah	Jan. 19, 1971
Denton, Irving Lee	Fordsville	Mar. 15, 1971
Eggers, Hiram Simm	Louisville	May 22, 1971
English, Robert Howard	Henderson	April 24, 1971
Evans, Leo R.	Central City	July 29, 1971
Freeman Galen H.	Bowling Green	No date
Gibbs, S. C.	Lawrenceburg	Mar. 28, 1971
Hamilton, Joseph E.	Louisville	June 15, 1971
Harrison, Paul	Corbin	June 7, 1971
Hawkins, Clarence David	Louisville	April 10, 1971
Hays, Earl T., Jr.	Berea	June 21, 1971
Hilbun, William B.	Columbia, S.C.	July 3, 1971
Howard, Carl Clifford	Glasgow	June 2, 1971
Huesing, William Ignatius	Newport	Jan. 1, 1971
Jones, David L.	Fulton	April 16, 1971
Kelly, Montford Fulton	Hindman	No date
Long, Robert F.	Somerset	Dec. 8, 1970
Lyon, Addie M.	Ashland	Mar. 3, 1971
Mason, Ora Hannah Kress	Murray	Sept. 20, 1970
McLean, Charles Grandison	Lexington	Mar. 26, 1971
Mitchell, Walter A.	Louisville	April 11, 1971
Napier, Merle D.	Hopkinsville	May 20, 1971
Noland, Hulbert Viars	Louisville	April 25, 1971
Odoy, Loreto K.	Covington	Sept. 14, 1970
Patterson, J. L.	Wheelwright	Jan. 1, 1970
Ray, Joseph Manuel	Out of State	Mey 26, 1971
Rich, Wallace Edward	Lexington	Sept. 18, 1970
Riley, George Hankins	Erlanger	April 12, 1971
Satelo, Delfor	Louisville	Feb. 9, 1971
Schutz, William Jack	Louisville	Oct. 23, 1970
Sewell, Price, Jr.	Jackson	Nov. 14, 1970
Stites, John	Louisville	Oct. 20, 1970
Strode, Ernest Cole	Lexington	Mar. 29, 1971
Thurman, David H., Sr.	Louisville	Aug. 1, 1971
Upton, David R.	Munfordville	May 13, 1971
Welte, Fred Harry, Jr.	Ft. Thomas	Feb. 1, 1971
Woodson, Hylan Hale	Eddyville	Feb. 5, 1971
Wyatt, Walter Simrall	Lexington	Nov. 10, 1970

Doctor Greathouse then announced the Reference Committee appointments as follows:

Reference Committee No. 1

Winston L. Burke, M.D., Lexington, Chairman
Irving Kanner, M.D., Lexington
Norman A. Parrott, M.D., Paducah
Fred C. Rainey, M.D., Elizabethtown
A. B. Richards, M.D., Louisa

**Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

Reference Committee No. 2

James O. Willoughby, M.D., Bowling Green, Chairman
Robert M. Blake, M.D., Maysville
Peter P. Bosomworth, M.D., Lexington
C. Douglas LeNeave, M.D., Mayfield
Robert G. Overstreet, M.D., Louisville

Reference Committee No. 3

Robert L. McClendon, M.D., Louisville, Chairman
Carl J. Brueggemann, M.D., Covington
John S. Oldham, M.D., Owensboro
Charles B. Stacy, M.D., Pineville
Raymond D. Wells, M.D., Inez

Reference Committee No. 4

W. Neville Caudill, M.D., Louisville, Chairman
Glenn F. Baird, M.D., Florence
Leslie W. Blakey, M.D., Lexington
John W. McClellan, M.D., Henderson
Lowell F. Roberts, M.D., McDowell

Reference Committee No. 5

Frank A. Bechtel, M.D., Louisville, Chairman
Harold L. Bushey, M.D., Barbourville
Stephen B. Kelley, M.D., Somerset
Richard B. McElvein, M.D., Lexington
N. H. Talley, Jr., M.D., Princeton

Reference Committee No. 6

W. Vinson Pierce, M.D., Covington, Chairman
Glenn W. Bryant, M.D., Louisville
Jerry D. Fraim, M.D., Paintsville
William N. Richardson, M.D., Cadiz
J. Sankey Williams, M.D., Nicholasville

The Speaker reported that the tellers for the meeting would be W. Donald Janney, M.D., Covington, Chairman; Chester M. Blanton, M.D., Paducah; and James B. Holloway, M.D., Lexington.

The reports of the officers and committees were presented by the Speaker and then referred to the respective Reference Committees as follows: (Only the reports of the officers were read.)

Report of the President—Reference Committee No. 1.

At this time, Doctor Quertermous combined his Annual Report of the President and the Presidential Address in one presentation.

Report of the President, Woman's Auxiliary to KMA—Reference Committee No. 1

Report of the President-Elect—Reference Committee No. 1

Report of the Speaker of the House—Reference Committee No. 1

Report of the Chairman, Board of Trustees—Reference Committee No. 1, with the following exceptions: The last paragraph on page 9 ending at the top of page 10 of the reports booklet referred to Reference Committee No. 6; paragraphs 9 and 13 on page 10 referred to Reference Committee No. 6; paragraphs 7, 8, 9, 13, and 14 on page 11 referred to Reference Committee No. 6; the first paragraph on page 12 referred to Reference Committee No. 2; the Building Committee Report on page 12 referred to Reference Committee No. 6; the Ad Hoc Committee on Electronic Data Processing Report on page 12 referred to Reference Committee No. 4; the Report of the Ad Hoc Committee on Cults, page 13, referred to Reference Committee No. 3; the Report of the Ad Hoc Committee to Study Peer Review Activities, pages 13-16, referred to Reference Committee No. 5; and the Ad Hoc Committee on Health Manpower Report on page 16 referred to Reference Committee No. 5.

Doctor Greathouse announced that the Chairman of the KMA Awards Committee, Douglas E. Scott, M.D., Lexington, would now present his Committee's report to the House. Doctor Scott stated that his Committee's responsibility was to nominate individuals for the Outstanding General Practitioner Award and the Distinguished Service Medal. Homer Burl Mack, M.D., Pewee Valley, was nominated for the Outstanding General Practitioner Award. A motion was made, seconded, and carried to accept this nomination and confer the award upon Doctor Mack. Robert E. Pennington, M.D., London, was nominated for the Distinguished Service Medal; following which a motion was made, seconded, and carried to accept the nomination and confer the medal upon Doctor Pennington.

The Speaker then continued with the referrals of reports to the Reference Committees.

Report of the Secretary—Reference Committee No. 1

Report of the Editor—Reference Committee No. 1

Report of the Treasurer—Reference Committee No. 1

Report of the Delegates to AMA—Reference Committee No. 1

Report of the Executive Secretary—Reference Committee No. 1

The Kentucky State Association of Medical Assistants served coffee and sweet rolls to the members of the House at 10:25 a.m. in the rear of the Louisville Royal Room.

At this time, Doctor Greathouse announced that in keeping with a Board of Trustees recommendation, the President of each of the Student AMA Chapters had been invited to present an oral report to the House. He reported that the President of the University of

Kentucky College of Medicine SAMA Chapter, Mr. Bob Cooper, was unable to attend the Meeting and then called Mr. George Barrows, President of the University of Louisville School of Medicine SAMA Chapter, to the podium for his report. Mr. Barrows' report was very well received and Doctor Greathouse commended him on his presentation.

Report of the Judicial Council—Reference Committee No. 6

Report of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.—Reference Committee No. 4

Report of the Scientific Program Committee—Reference Committee No. 2

Report of the Scientific Exhibits Committee—Reference Committee No. 2

Report of the Committee on Medical Education—Reference Committee No. 2

Report of the Hospital Committee—Reference Committee No. 2

Report of the Committee on Educational Television—Reference Committee No. 2

Report of the Disaster Medical Care Committee—Reference Committee No. 2

Report of the Cancer Coordinating Committee—Reference Committee No. 2

Report of the Advisory Committee to Blue Shield—Reference Committee No. 4, with the following exceptions: Paragraph 5 on page 31 and paragraphs 1 and 2 on page 32 of the reports booklet referred to Reference Committee No. 6; and paragraphs 3, 4, and 5 on page 32 referred to Reference Committee No. 5.

Report of the Advisory Committee to Blue Cross—Reference Committee No. 4

Report of the Committee on Occupational Health, Physical Medicine, and Rehabilitation—Reference Committee No. 3.

Report of the Committee on Medical Economics—Reference Committee No. 6

Report of the Maternal Mortality Study Committee—Reference Committee No. 3

Report of the Advisory Committee to Selective Service—Reference Committee No. 5

Report of the Committee to Study the Constitution and Bylaws—Reference Committee No. 6

Report of the Interim Meeting Program Committee—Reference Committee No. 6

Report of the McDowell House Board of Managers—Reference Committee No. 6

Report of the Memorials Commission—Reference Committee No. 6

Report of the Committee on Legislative Activities—Reference Committee No. 3

Report of the Committee on Orientation—Reference Committee No. 3

Report of the Committee on Health Careers—Reference Committee No. 3

Report of the Committee on Community and Rural Health—Reference Committee No. 4

Report of the Committee on Environmental Quality—Reference Committee No. 4

Report of the Committee on Cults—Reference Committee No. 3

Report of the Senior Day Committee—Reference Committee No. 4

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports—Reference Committee No. 4

Report of the Advisory Committee to the Woman's Auxiliary—Reference Committee No. 1

Report of the Public Relations Committee—Reference Committee No. 4

Report of the Coordinating Commission on Governmental Medical Services—Reference Committee No. 5

Report of the Technical Advisory Committee on Physician Services (Title XIX)—Reference Committee No. 5

Report of the Advisory Committee on Title XVIII (Social Security Act)—Reference Committee No. 5

Report of the Claims and Utilization Review Committee—Reference Committee No. 5

Report of the Committee on Appalachian and OEO Programs—Reference Committee No. 5

Report of the Committee on Plans and Development—Reference Committee No. 6

Report of the Interspecialty Council—Reference Committee No. 3

Report of the Medicine and Religion Committee—Reference Committee No. 2

New Business

New Business was presented to the House by the Speaker and referred to Reference Committees indicated as follows:

(A) Resolution from Harlan County Medical Society relating to the Licensure of Foreign Medical Graduates—Reference Committee No. 2

(B) Resolution of Fayette County Medical Society pertaining to KMA Emeritus Membership—Reference Committee No. 6

(C) Resolution of Fayette County Medical Society pertaining to Professional Services in Competency Hearings—Reference Committee No. 3

(D) Resolution of Allen County Medical Society on the subject of Medicaid—Reference Committee No. 5

(E) Resolution of Allen County Medical Society concerning Third Party Medicine—Reference Committee No. 5

(F) Resolution of Fayette County Medical Society relating to Funding Departments of Family Practice—Reference Committee No. 2

(G) Resolution from Fayette County on the subject of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 4

(H) Resolution from Nelson County relating to Third Party Payment Plans—Reference Committee No. 4

(I) Resolution introduced by the KMA Board of Trustees concerning Distinguished Service Award Changes—Reference Committee No. 1

(J) Resolution of the KMA Board of Trustees pertaining to Discontinuance of the Outstanding General Practitioner Award—Reference Committee No. 1

(K) Resolution from the KMA Board of Trustees on the subject of KMA Membership Clarification of Interns and Residents—Reference Committee No. 6

(L) Resolution of Jefferson County Medical Society concerning Physicians on City County Health Department Boards—Reference Committee No. 3

(M) Resolution from Jefferson County Medical Society on Medicaid—Reference Committee No. 5

(N) Resolution from Fayette County Medical Society pertaining to Current Procedural Terminology—Reference Committee No. 4

(O) Resolution of Warren County Medical Society on Accuracy in News Reporting and Editorials—Reference Committee No. 4

(P) Resolution from Floyd County Medical Society relating to Admission of Members to the KMA—Reference Committee No. 6

(Q) Resolution from Floyd County Medical Society on the subject of Kentucky State Medical License—Reference Committee No. 3

(R) Resolution of Floyd County pertaining to Health Oriented Programs—Reference Committee No. 5

Vice-Speaker Cooper announced the meeting places for the Nominating Committees for general officers and the five trustee districts electing trustees and alternates this year. Doctor Cooper stated that the Nominating Committee would report immediately following the close of the first scientific session on Tuesday morning at the Convention Center, as well as at the second meeting of the House on Wednesday. In accord with the Bylaws, nominations may be made from the floor on Wednesday without discussion or comment. Doctor Cooper then named the physicians on the Nominating Committee as follows: John M. Baird, M.D., Danville, Chairman; John H. Doyle, M.D., Louisville; Kenneth M. Eblen, M.D., Henderson; Fred C. Rainey, M.D., Elizabethtown; and Carl H. Scott, M.D., Lexington. In completing his announcements, Doctor Cooper reminded the Reference Committee Chairmen of their noon luncheon.

The first session of the House of Delegates was adjourned at 11:00 a.m.

**In order to make the Digest of Proceedings of the second meeting of the House of Delegates more understandable and because it will occupy less space in The Journal, the KMA Board of Trustees passed the following motion several years ago: "that if no dissenting action on the Committee's recommendations is made either by the Committee or the KMA Board of Trustees, only the Reference Committee action on the report be printed in The Journal."*

Second Session

Speaker Greathouse called the second session of the House of Delegates to order on September 22, at 7:15 p.m., and the invocation was given by J. Campbell Cantrill, M.D., Georgetown. Doctor Oliver reported that a quorum was present.

Lee C. Hess, M.D., Florence, Chairman of the Board of Trustees, was then recognized to present the final report of the Board. He read the following resolution, which was passed by the Board at its September 22 meeting, and moved its adoption. The motion was seconded and carried:

WHEREAS, the 1971 KMA Annual Meeting has made a substantial contribution in the field of continuing medical education and has been well received, and

WHEREAS, many individuals, organizations and agencies, including guests, and state essayists, scientific and technical exhibitors, newspapers, radio, and television stations, hotels, and the Convention Center, have contributed to its success, there be it

RESOLVED, that this House of Delegates go on record as expressing its deepest appreciation to all individuals and organizations who have had a part in the development and implementation of the 1971 Annual Meeting.

Following this action, Doctor Scheen was called to the podium, and he gave special recognition to the representatives of the surrounding state medical associations who attended KMA's Annual Session. These were: L. T. Fruin, M.D., President, Indiana State Medical Association; Malcolm O. Scamahorn, M.D., President, Indiana State Medical Association; John H. Saffold, M.D., President, Tennessee Medical Association; Harry S. Weeks, Jr., M.D., President, West Virginia State Medical Association; Harold H. Hiscock, M.D., President, Michigan State Medical Society; and William D. Liddle, Jr., M.D., 1st Vice-President, The Medical Society of Virginia.

The Vice-Speaker said that the report of the Reference Committees would now be read.

REFERENCE COMMITTEE NO. 1*

Winston L. Burke, M. D.
Lexington, Chairman

Reference Committee No. 1 considered the following reports:

1. Report of the President
2. Report of the President, Woman's Auxiliary to KMA

3. Report of the President-Elect
4. Report of the Speaker of the House
5. Report of the Chairman, Board of Trustees
 All matters relating to the building addition and to the Medical Economics Committee are referred to Reference Committee No. 6. These include the following:
 Last paragraph on page 9; paragraphs 9 and 13 on page 10; paragraphs 7, 8, 9, 13, and 14 on page 11; and the Report of the Building Committee
 Paragraph 1 on page 12 referred to Reference Committee No. 2
 Ad Hoc Committee on Electronic Data Processing Report referred to Reference Committee No. 4
 Ad Hoc Committee on Cults Report referred to Reference Committee No. 3
 Ad Hoc Committee to Study Peer Review Activities Report referred to Reference Committee No. 5
 Ad Hoc Committee on Health Manpower Report referred to Reference Committee No. 5
6. Report of the Secretary
7. Report of the Editor
8. Report of the Treasurer
9. Report of the Delegates to AMA
10. Report of the Executive Director
39. Report of the Advisory Committee to the Woman's Auxiliary
 Resolution I — Distinguished Service Award Changes (KMA Board of Trustees)
 Resolution J—Discontinuance of Outstanding General Practitioner Award (KMA Board of Trustees)

Report of the President

The past year, and the several preceding it, have been deeply rewarding and I take this last chance to offer my thanks for your confidence and to many of you for your dedication in making it possible for this year to have been a good one.

My goal, during the year, has not been to give answers to the problems facing us but rather to stimulate thought pertaining to them. Surely, from a group such as this something good has to happen—if we think.

The "game" we've played for the past several years has been hard, vital and fascinating. The future of medicine, for decades to come, may well rest on decisions made by us—now. Appropos of the story of life we have won some and lost some. The stakes get higher and higher.

As men whose primary purpose it is to take care of the sick, it has been necessary for us to take up the political gamut. Most of us have assumed the political role with trepidation and under great duress. Some feel they have dirtied their hands in politics at the expense of their patients welfare. It is possible our conscience has made cowards of us all.

During my tenure in the intimate structure of organized medicine, the Kentucky Medical Association has become a big organization. It has become big at the behest of all of you who have requested more and more services from our Headquarters, which is the clearing house and action group for the problems of the doctors of Kentucky. Our Headquarters functions extremely well. The committee structure has enlarged of necessity, and is more productive in many areas in behalf of all of us. Even more is needed, including greater cohesion between KMA Headquarters and the headquarters of the component specialty groups, none of which can function as well autonomously.

A few years ago, as we awoke to reality, our "workingest" committee became the one concerned with legislation. Now they must share this envious (?) role with the Committee on Peer Review and the Judicial Council. Our position is incalculably improved because of the activities of these committees. Their work has made it possible for us to forestall some areas of government intervention into medical affairs. We are greatly in their debt for the fine, constructive, and objective work they are doing.

Because of the many problems facing medicine at this juncture, I will commit the balance of this report with the problems I think are the most critical to us as an organization and as individual practitioners. By "individual practitioners" I mean all of us who are engaged in the practice of medicine in any form.

MEDICAL MANPOWER

Observations, by knowledgeable men, have run the scale from statements that "There is no actual physician shortage—there is only a problem of physician distribution," to the statement: "If we doubled the physician population in the next ten years, there would still be a shortage." These statements could cause us to feel over complacent or panic, depending on how each of us looks at it. To say the least, there are certainly areas where there are not enough doctors, but I can think of no political action that has been proposed, or could be proposed, that will force doctors into areas where the living potential is poor and where the poor medical statistics are due to sociological rather than purely medical care factors. Protagonists for the Kennedy type NHI would make the voters, think, cruelly I believe, that this program would place doctors into the needy areas. It won't, short of conscription, and I don't think the country will tolerate such an action.

As for the "Physician's Assistant," I am sure there is a need for them in several capacities and think that more programs should be developed for their production. However, we must beware lest they become autonomous, away from the direct supervision of physicians, and develop into a "sub-medical" culture that could be harmful to the ideal of good medical practice.

I would rather see the production of many more good RNs and LPNs—of either sex, but it seems a shame to waste the training so many people have already had in ancillary medical care.

DRUGS

There must be some truth in the repeated observations that many citizens of the United States have become too reliant on drugs. Drugs to turn us on, drugs to turn us off.

President Nixon and Governor Nunn have made earnest requests to the profession that we assume roles of leadership in trying to bring this problem under control. I recommend that as citizens and as professionals, we join in community programs directed to this problem and, in those communities where such a program does not exist, we take a leading role in creating one.

RE-EDUCATION

As the peer review mechanism becomes more active, and discerning, an occasional physician will be found to be practicing sub-standard medicine and whose diagnostic acumen and knowledge of modes of treatment have dwindled.

Some of this will have been brought about by that physician's inability to leave his large practice and avail himself of refresher opportunities. The cumulative effect of this over the years can be devastating—especially in this day of precipitous medical advancement.

Most of these men will require "re-education" at a relatively primary level, and, since KMA has no facilities or mechanism to provide this relatively primary education, we should encourage our fine medical schools to establish these re-educational programs and give all possible assistance in their formation and management. Kentucky needs every physician we can produce or salvage.

The KMA scientific programs are properly directed to teaching new methods and discoveries and hardly have time during their short sessions to furnish the basic reassessments that will cover a several years academic hiatus.

MEDICAL FOUNDATIONS

I think we all agree that peer review is accomplished better by "peers."

A peer, to a physician, is another physician and preferably one in his own type of practice.

Such review would be accomplished better on a state level but starting at the component society level. However, there are legal barriers to state and county medical societies contracting to perform peer review—so, in order to keep this function at a medical society level, it is necessary to set up a foundation for this purpose. Eventually the Foundation could perform other services for us.

A start has been made in this direction and much time has been spent in educational programs over the State concerning it.

I would ask the physicians of the State to give this foundation concept its wholehearted support and encouragement.

OEO — HMO — CHP

A Comprehensive Health Planning Committee was established by the State of Kentucky with the blessings and help of KMA. Among its purposes were inquiry into areas where various types of medical services are needed, finding ways to rectify various inequities and to prevent redundancies of facilities and personnel.

Service was a factor and cost was a factor. The Committee structure is excellent and the members are knowledgeable as to the needs of our State.

The Office of Economic Opportunity in the process of fulfilling their mission of relieving poverty came to the decision that providing medical care was part of their mission. They apparently believe that they should have an unimpeded hand, insist that it should be accomplished by Health Maintenance Organizations (only) and resist consultation with and advice from the Comprehensive Health Planning Committee.

It would seem that adequate or good medical care is not enough to satisfy them in their zeal, but they must also promote the philosophy of prepaid medical care and salaried physicians to ease their pain.

I would recommend that KMA take whatever steps are in their power to require that any major, new medical facility supplied with government funds be required to have the approval of the Comprehensive Health Planning Council before it is welcomed into our State.

There has been too much exemplary work done by staff, committees and individuals to make it feasible for me to offer special commendations.

The teamwork demonstrated by the entire organization has, in my opinion, been unprecedented and the year a very productive one.

I sincerely wish the incoming President and you my very best during this coming year.

John C. Quertermous, M.D., President

Recommendations, Reference Committee No. 1

The Report of the President was reviewed at length. Specific attention was given his observations regarding medical manpower, drugs, re-education of physicians, and medical foundations. This Committee feels that an extremely valuable contribution has been provided, and we congratulate him on a job well done. We are also in absolute agreement regarding his thoughts on the Office of Economic Opportunity, the Health Maintenance Organization, and the Comprehensive Health Planning Committee, and would re-emphasize his recommendation that KMA take whatever steps are in their power to require that any major new medical facility supplied with government funds be required to have the approval of the Comprehensive Health Planning Council before it is welcomed into our State.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the President of the Woman's Auxiliary

"Be sensitive in the Seventies" is the theme which the Auxiliary chose for 1970-71, implying a need for greater sensitivity to the needs of other people. With this type of awareness innovation, creativity and action followed.

The year began with the attendance of the President and President-Elect at the WA-AMA Fall Conference in Chicago. This was followed by the Southern Regional Workshop in New Orleans at which time certain key members of the State Board of Directors were invited to participate in a planning session for auxiliaries for the year.

While enthusiasm was still at a high pitch from the Southern Regional Workshop, a Travel Team was organized to lead area workshops throughout the State. Members of the team included the following chairmen: AMAERF, Children and Youth Community Service, Health Careers, Legislation, Workshop Coordinator, President-Elect and President. The Team was well received in all three areas. This program will be expanded next year both in terms of having a larger Travel Team and in area covered. By having the workshops early in the year, a good working relationship was developed between leaders and participating auxiliaries.

Mrs. Charles Davis, Chairman of the Children and Youth Committee, acted as coordinator for a vast, statewide program on drug abuse for Governor Nunn. Several thousand youths and adults attended this program which included small group sessions with former addicts, speeches by representatives of various state agencies and a speech by the Governor. This program is probably the most far-reaching, comprehensive program which has been initiated in Kentucky on any subject. This is one of many examples which could be cited of the Auxiliary working in cooperation with other agencies on common problems.

Auxiliaries were asked to aid the Kentucky Educational Television in publicizing the informational series, "The Turned-on Crisis." The challenge was accepted, and money and time were spent on this activity. As a result, the Woman's Auxiliary to KMA has been asked to serve on the Advisory Board of KET. We see this as a further opportunity for service in public education in the field of health, providing informational materials for programs and working in a liaison capacity between physicians and KET.

Another central focus this year has been Health Careers. Mini-Health Career Fairs were held in numerous high schools. Two high schools have formed Health Career Clubs. Jefferson County purchased a Health Career Slide Program to be shown in high schools. We have a representative on the Board of Health Careers in Kentucky. The total amount offered by counties for Health Career Loans is approximately $27,400 and the amount for scholarships is $2,892.

Members of the Fayette County Woman's Auxiliary received a plaque for their outstanding volunteer services to the Central Kentucky Blood Center.

Another aspect of community service has been that of alerting the public to the dangers of environmental pollution in terms of health and well-being. Vision screening and a non-profit nursery school are other ways in which members have shown sensitivity to human need and have reacted with positive programs.

Funds for AMAERF have been raised through auctions, sale of watches ($500), fruit cakes, note paper, Christmas cards, Gudea vases and rose bushes. Members of the Travel Team made and sold Christmas decorations. Demand for these exceeded supply. According to Chicago, the total contribution of Kentucky for 1970 is $6,635.20.

The McDowell House continues to attract hundreds of visitors both from its historic and aesthetic value. Auxiliaries contribute to its support.

Introduction of the "whole man" concept was implemented by the Mental Health Chairman. Several auxiliaries responded by inviting ministers' wives to their meetings. One county is conducting its mental health program through films to parents in churches and civic groups. A "hot line," which any individual may call for counseling, has been instituted in one seven-county area.

During Community Health Week, information on immunization laws was distributed to local radio stations and to industries for publication in daily or weekly bulletins.

In the field of international health, a library of medical journals has been sent to medical schools in India. Foreign students have been entertained in the homes of physicians.

The *Blue Grass News* has been published on a quarterly basis. A page in the KMA *Journal* has been devoted to correlating the activities of the Auxiliary with KMA.

Two other organizations have asked for our cooperation. We have given it, again showing that physicians' wives are sensitive to need and are interested in a wide variety of activities through which community health can be approached. Doctor Woodrow Strickler asked our help in publicizing and participating in an annual Conference on Foreign Policy held at the University of Louisville. Governor Nunn appointed me to serve on his Commission on Aging and to participate in the Governor's Conference on Aging. Another member of the Board of Directors serves on this Commission.

I am grateful to Mr. Robert Cox, Mr. Gilbert Armstrong, Mr. William Applegate, Mr. Jerry Mahoney, Mrs. Fay Miles, Blue Cross and Blue Shield and the entire KMA staff for their help. It has been an honor to serve as President of the Woman's Auxiliary to the Kentucky Medical Association.

Mrs. Charles E. Hornaday, President
Woman's Auxiliary to the KMA

Recommendations, Reference Committee No. 1

The Report of the President, Woman's Auxiliary to KMA, was reviewed, and this Committee is quite awed by the continuing increase in their activities and in their interests. The State-wide program on drug abuse alone would be more than enough to reward them, and yet their activities regarding Kentucky Educational Television, their Mini-Health Career Fairs, their program of alerting the public to the problem of environmental pollution, and their McDowell House activities, in addition to their other many activities, all prove that they are truly "sensitive in the Seventies." We congratulate the members of the Woman's Auxiliary and particularly express our gratitude to their President.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the President-Elect

The year of learning, without responsibilities, draws to a close with mixed emotions for the President-Elect. Since my graduation from medical school, medicine has had a crisis of some kind every year. The future of first rate medical care in this country depends on all of us. If the American public is "sold" some type of medical care that will be less than first rate, we will be the ones blamed by the politicians. The admonition of President Nixon, in his address to the AMA, was perfectly clear, "If the doctors do not become interested in politics, there may not be a profession to defend."

I am sure anyone becoming involved with KMA will be proud of the enormous amount of work being done by the various committees and the excellent staff of the organization. I am certain, from my year of exposure, that whatever change occurs in the method of practice, that the KMA will be able to guide its members to the best possible solution in their delivery of health care.

The Kentucky legislative session will increase the work load of the KMA staff and of many committees in the coming year. I am sure we will be well informed of what is pending in Frankfort.

The AMA meeting in Boston last fall and the recent one in Atlantic City were extremely effective in presenting the political picture as it affects medicine. There is no doubt that most of the "medical crisis" in America today is being manufactured in the minds of those people who would like to socialize medical care. I believe the AMA will do everything possible to guide legislation to protect the American public from the mediocrity of socialized medicine. The AMA needs the support of all of the doctors. Doctor critics of the AMA need to get more involved and to understand that policy of the AMA arises at the grass roots level.

The meeting with the AMA Washington staff and our Kentucky legislators in Washington last winter was most informative to me. We did make ourselves known and apparently parted on good terms.

The Blue Shield meeting in San Francisco was extremely interesting in presenting the national picture of health insurance.

The meeting of the University of Louisville and the University of Kentucky Medical Schools at Park Mammoth was very useful. The University of Louisville should get more of its faculty to this meeting in the future.

The addition to the KMA Building should be under way by the time this appears in print. The expansion of KMA into peer review, foundations, et cetera, is causing too much crowding in the present structure.

Besides the meetings of the KMA Board of Trustees, the Executive Committee, and various other committees, as well as the meeting mentioned above, I have represented KMA at meetings of the Indiana Medical Society, the State Nurses Association, the Industrial Medical Society, the State Hospital Association, and attended meetings of KEMPAC and a district meeting at Henderson.

The coming year promises to be an interesting one. I have no doubts of the future of KMA to come through in fine shape with the guidance of the excellent staff and the dedicated physicians serving on the various committees. The Executive Committee and the Board of Trustees, as chaired by Lee C. Hess, M.D., have accomplished an enormous amount of work over the past year and it has been a privilege to be a part of the organization.

John S. Harter, M.D., President-Elect

Recommendations, Reference Committee No. 1

The Report of the President-Elect was reviewed; the Committee wishes him a most successful term of office for the coming year.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Speaker of the House

Each fall, it is the duty of the Speaker to call the attention of the delegates to the work at hand for the Annual Meeting. There will be no difference in the format or procedural methods utilized in the meeting this fall. We still have six Reference Committees; reports and resolutions will be referred on the morning of the first meeting to the appropriate Reference Committee. After due deliberation, the Chairman of each Committee will dictate a report and will sign it along with the members of his Committee for final submission to the House at its second session.

The Speaker thought it would be of interest if you knew the statistics on the attendance in recent years at the House of Delegates. I thought this would be particularly timely since it appears the number of seated or qualified delegates has declined. In 1968, we had 135 delegates out of a possible 212 at the first session for an attendance of 64%. At the second session, we had 142 out of a possible 212 for 67%. In 1969, the number of eligible seated delegates was

199. Out of this 199, 139 attended the first meeting for an attendance record of 70%. At the second session, 145 delegates out of 199 attended for a record of 73%. Last year, 1970, the number of eligible delegates dropped a little more. One hundred ninety-seven delegates were certified by the county societies. Out of this, we had 138 attend the first session for a 70% record. At the second session, we had 139 out of this 197 for a 71% attendance record.

There must be a reason or reasons for various respective societies not sending in or certifying their delegate representatives. This means that their respective group will not be represented at the Annual Meeting where the policy-making goes on unless they send some later word of certification so that the Speaker may later appoint a delegate to appropriately represent that society. It has been my experience in the past few years that this rarely occurs. The Speaker, therefore, would like to urge and call your attention to the fact that the number of eligible delegates has declined, and some attention must be given on the part of respective society groups to improve their representation at the Annual Meeting.

We have many, many important things to consider for example at this 1971 session. The delegates' attention will be directed to such important items as the Medicaid program, quality health care, reorganization of the State Board of Health, medical licensure, environmental control and quality, professional liability insurance, some coordination of efforts in the field of health care, the Rural Medical Scholarship Fund, physician's assistants, and last, but most importantly, peer review.

We must also mention that the delegates attention will be called to the recommendations of the Medical Economics Committee wherein they proposed a Kentucky Foundation for Medical Care. All of these important matters will have to be considered by the House of Delegates this fall. All reports will again be in booklet form so that you may refer to them and read them more easily, and we hope that you will come to the sessions, which this year will be at the Seelbach instead of the Kentucky Hotel, and represent your society and partake of the important policy-making that goes on in the House of Delegates.

Remember, discuss, study and guide the programs for your medical society on the statewide basis for the ensuing year.

Again, Doctor Cooper and I would like to thank the delegates for their time and attention to duty at each session of the House. We are happy to have served you in our capacity as Speaker and Vice-Speaker.

Richard F. Greathouse, M.D., Speaker
Carl Cooper, M.D., Vice-Speaker

Recommendations, Reference Committee No. 1

The Report of the Speaker of the House was considered by the Committee; and we wish to commend the Speaker and Vice-Speaker for their continued efforts in conducting the business of the House in the appropriate manner.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman of Board of Trustees

For the second time in three years, I have the privilege of reporting to you as Chairman of your Board of Trustees. In attempting to summarize the activities of your Board, I find it even more difficult than previously, because of the many new and varied programs being conducted by your Association. I know there is no way to fully inform the membership of what all takes place around the hub of your Headquarters Building. If this could be done by some method of intravenous injection, I know each of you would be extremely proud to belong to an organization dedicated to serving your interests through the efforts of physicians who give unselfishly hundreds of man-hours amassing a record of accomplishments along with the fruitful efforts of an energetic and faithful staff.

Your Board conducted eight meetings during the 1970-71 year, while the Executive Committee found it necessary to also gather in session eight times.

As the responsibilities of the Board increase each year, I especially want to express my personal appreciation to each Board member and every KMA member who contributed so magnificiently this year to assure what I feel was a most successful year for KMA. The reward of "doing for your profession" creates a lasting feeling which I challenge more of you to seek. Create and participate—it is a time for new ideas and much action.

First Meeting, September 24, 1970

Acting as temporary Chairman, S. R. Scheen, M.D., opened the first meeting on the 1970-71 Associational year and recognized the new trustees who were as follows: Charles C. Kissinger, M.D., Second District; Thomas P. Leonard, Sr., M.D., Seventh District; and J. Wesley Johnson, M.D., Thirteenth District. He then introduced the new President-Elect, John S. Harter, M.D., and the Vice-President, Richard Grise, M.D.

Re-elected to positions formerly held were: J. Thomas Giannini, M.D., AMA Delegate; Charles Bryant, M.D., AMA Alternate Delegate; and James C. Cantrill, M.D., Ninth District Trustee.

It was also noted that David Hull, M.D., immediate past Vice-President, was now serving in the new position of Tenth District Trustee. Lee C. Hess, M.D., Florence, was elected Chairman of the Board of Trustees, and Robert McLeod, Jr., M.D., Somerset, Vice-Chairman. The Executive Committee was formed when John Llewellyn, M.D., Louisville, and David Hull, M.D., Lexington, were elected to represent the Board of Trustees on the Executive Committee.

Following routine announcements and agenda

items, the Board proceeded to nominate the membership for committees to serve during the Associational year.

Second Meeting, December 10, 1970

The Board of Trustees held its second meeting of the 1970-71 Associational year at the KMA Headquarters Building on December 10, 1970. The Chairman of the Board of Trustees introduced J. Wesley Johnson, M.D., Ashland, new member of the Board, and reported that KMA had been notified on December 8, 1970, of the death of Robert F. Long, M.D., Somerset, former member of the Board of Trustees.

Accepted for information were the President's report, the Headquarters Office report, and the report of the Senior Delegate to AMA. A general mailing was authorized in support of Carroll L. Witten, M.D., Louisville, in his bid for re-election to the AMA Council on Constitution and Bylaws. Walter I. Hume, Jr., M.D., Louisville, Chairman of the Committee on Medical Education, reported that the Biennial Conference on Medical Education was to be held January 23 and 24, 1971, at Park Mammoth Lodge. The Board of Trustees acted affirmatively on the program recommendations of the Committee on Medical Education so that they could make preparations for the conference.

Legal counsel reported on a number of matters at the request of the Board of Trustees to include the subjects of chiropractic, a court case involving the statue of limitations, incorporation of the Auxiliary, and a Judicial Council request relating to Bonco Labs, Inc. Further attempts to obtain names and addresses of all Bonco Lab stockholders was authorized.

A maternity case involving the Prestonsburg Hospital was discussed at length. A statement was prepared and presented to the Press, following the meeting, which set forth KMA's position on this matter, based on the information available.

John A. Logan, M.D., Henderson, and Donald C. Barton, M.D., Corbin, were nominated by the KEMPAC Board to succeed John C. Quertermous, M.D., Murray, and Meredith J. Evans, M.D., Middlesboro. These recommendations were accepted by the Board of Trustees.

The Board voted to support "current procedural terminology" as the system of coding for medical and surgical procedures. This action, endorsing use of the five-digit code, will be reported to all interested parties for long range planning purposes. The Chairman then announced the appointment of a Peer Review Study Committee in compliance with Resolution D, passed by the House of Delegates in September, 1970.

A letter was read from Marvin A. Bowers, M.D., Louisville, requesting that trustee district claims and utilization review committees be deferred until framework and guidelines can be established. It was taken by consent that this be postponed as requested. Robert C. Long, M.D., Louisville, reported on the current activities and goals of the newly formed Public Relations Committee to include implementation of specific actions referred to it by the Board. It was further noted that KMA's public relations' consultant will begin his duties January 1, 1971.

A discussion was held concerning dates and conflicting conventions for the 1972 Annual Meeting. The Board voted to set the dates for the 1972 Annual Meeting as September 19-21 to avoid conflict with an International Furniture Convention. The dates had previously been a week later.

The Committee on Health Careers presented five recommendations to the Board, and they were accepted for implementation during this Associational year. These ranged from endorsements of allied career training programs to authorization for construction of an exhibit. The Ad Hoc Committee on Chiropractic made five recommendations concerning its proposed educational programs and other activities. After the discussion, the Board authorized the Ad Hoc Committee to proceed as outlined in their proposals.

The Board voted, after discussion by the Legislative Committee, that the annual Washington Dinner would be held on March 15 and 16, 1971, immediately following the AMPAC Seminar in the same location.

John C. Quertermous, M.D., Murray, President of KMA, reported on the meeting of the Interim Meeting Committee, noting that it will be held on April 14, 15, 16, 1971, at Cave City Holiday Inn, and an excellent program has been planned.

After lengthy discussion, a recommendation of the Hospital Committee concerning liability of physicians and hospitals resulting from blood transfusions was accepted by the Board and implementation was requested. The recommendation asked that the Legislative Committee take proper action at the legislative level and that the Committee on Medical Economics review AMA model liability insurance proposals for possible use in Kentucky.

Recommendations for appointments to the Advisory Council on Health Facilities, the State Board of Health, and the Comprehensive Health Planning Council were made and forwarded to the Governor.

The Board recommended that AMA be requested to conduct a "Leadership Training Seminar" for KMA some time during the latter part of 1971. This recommendation was forwarded to AMA for their review and response.

There was a brief discussion concerning the appointment of alternate trustees as delegates to the KMA House of Delegates. It was taken by consent that this matter be referred to the Executive Committee for study and recommendations back to the Board.

The meeting adjourned following announcements of several committee appointment replacements and of Senior Day dates: University of Louisville, on March 15, and University of Kentucky, on May 11.

The next meeting of the Board was set for April 14, 1971, at Holiday Inn, Cave City.

Third Meeting, April 14, 1971

The third meeting of the Board of Trustees was held April 14, 1971, in conjunction with the KMA Interim Meeting in Cave City. The meeting began with the President's report given by John C. Quertermous, M.D., followed by the Headquarters Office report.

Ballard W. Cassady, M.D., Chairman of the KMA Budget Committee, presented the proposed budget for the 1971-72 Associational year. After study and discussion, the budget was approved by the Board.

Thomas L. Heavern, Jr., M.D., Chairman of the Ad Hoc Committee to Study Peer Review Activities, presented a one-month survey made by his Committee showing the amount of physician time spent in hospital and extended care facilities conducting peer review. He stated that the survey would continue for three more months and received permission to inquire of similar surveys in the other 49 states.

The Chairman of the Board, Lee C. Hess, M.D., announced that membership for peer review committees have been nominated for most districts. Each district Trustee was then asked to report on the status and the members who had been recommended in his district. The Board appointed Regional Peer Review Committees in the 1st, 2nd, 6th, 7th, 9th, 11th, and 13th KMA Trustee Districts.

Donald Patterson, M.D., representing the Department of HEW, was recognized by the Chairman to present some comments on health maintenance organizations. A question and answer session followed Doctor Patterson's presentation.

The Medical Education Committee recommended to delete the four-year requirement for a M.D. Degree to a three-year program which was referred to the Legislative Committee for study. A request for committee members to serve three-year terms was also received favorably.

The Board appointed a committee to study ways of interesting students in the medical profession in Kentucky and of encouraging physicians in other states to practice in Kentucky. The committee is to recommend to the Manpower Task Force of the Comprehensive Health Planning Council. Executive Committee recommendations acted upon favorably were: to continue the Orientation Program during the Annual Meeting and to refer to the Constitution and Bylaws Committee the Board request that Alternate Trustees be made members of KMA's House of Delegates.

The Chairman called on KMA's Legal Counsel to report on the lawsuit involving Bonco Labs, Inc. Following a full discussion, the report was accepted for information.

Chairman Hess informed the Board members that since the Kentucky Hotel may be sold in the near future, tentative study is now being made on the possibility of moving this year's Annual Meeting to the Seelbach Hotel. Following a brief discussion, the Board approved that the matter be referred to the KMA's Executive Committee, with a desire expressed that the Headquarters Hotel be changed.

David A. Hull, M.D., a Trustee and member of the Legislative Committee, reported on the 1971 Washington Dinner. He informed the members that the function was well attended and very productive.

The Chairman reported that recently considerable discussion has arisen concerning the duties and composition of the State Board of Health and the separation of medical licensure from the Board. After a brief discussion, the Board agreed that representatives of the Board of Health and KMA should meet in the near future.

The Board was informed that the Department of Health, Education and Welfare has scheduled two meetings in April, and that it has asked that a KMA staff member and a physician attend these meetings. The Board was also informed that a request has been made by the Merrell Company that KMA take a position against the action of the Food and Drug Administration to remove combination drugs from the market. The Board instructed the KMA Legal Counsel to compose and send the aforementioned letter and approved representation at the HEW meetings.

The meeting closed with the Board of Trustees nominating Robert N. McLeod, M.D., for appointment to the AMA Committee on Medical Aspects of Sports and with the announcement that President Quertermous would be attending the Annual Meeting of the Comprehensive Health Planning Conference and a statewide session on health care costs sponsored by the Kentucky Chamber of Commerce during the first week of May.

Fourth Meeting, April 16, 1971

A recommendation to have the 1972 KMA Interim Meeting changed from Cumberland Falls to Somerset was approved by the Board. A motion was then approved that the goals of the Subcommittee on Drug Abuse be approved as submitted. Following this, the meeting was adjourned.

Fifth Meeting, August 5, 1971

As usual, the August meeting of the Board is primarily to review committee reports being submitted to the House of Delegates, but much more action is required. Numerous committee chairmen were in attendance to present their reports in person, and two trustees had been assigned to comment on each report and submit a recommendation to the Board.

Routine but thorough presentations were made by the President, Senior Delegate to the AMA, and the KMA Corporate Secretary. A Judicial Council nominee was selected for submission to the House of Delegates, and the dates of September 20-23 were approved for the 1976 Annual Session.

The Board further voted to continue the activities of the Auxiliary Coordinator, utilize PR consultation as needed, and recognized the Kentucky Society for Plastic and Reconstructive Surgery to include authorization for scientific sessions by this specialty group at future Annual Meetings. Four Board meetings were set during the Annual Session, following which the meeting adjourned after a full day of actiivity.

In addition to attending the Board meetings, members of the Executive Committee worked diligently in eight additional sessions and on special assignments. Their business transactions are reported to the Board, and items of major importance are submitted to the Board with a recommendation for action.

The members of the Board are most appreciative to the seven ad hoc committees of the Board for their work this year. These ad hoc committees have reported periodically to the Board throughout the year.

The Ad Hoc Committee on Occupational Pulmonary Disease did not meet during this Associational year but held two meetings last year and worked in close conjunction with the Study Committee on Occupational Pulmonary Disease. It is expected that they would be more active in early 1972, a legislative year.

The Ad Hoc Committee to Study Statutes concerning Report of Communicable Disease was not called into session this year but, like the Committee to Study Occupational Pulmonary Disease, is expected to be more active prior to and during the 1972 Kentucky General Assembly.

Again, I thank you for the priviledge of serving as your Board Chairman.

Lee C. Hess, M.D., Chairman

Recommendations, Reference Committee No. 1

The Report of the Chairman, Board of Trustees, was reviewed with the exception of those sections regarding the matters relating to the building addition and to the Medical Economics Committee, the section regarding the KMA Educational Television Committee, the Ad Hoc Committee on Electronic Data Processing, the Ad Hoc Committee on Cults, the Ad Hoc Committee to Study Peer Review Activities, and the Ad Hoc Committee on Health Manpower. It was noted that the Board of Trustees was required to have more frequent meetings than the previous year, and that the volume and scope of their problems were greater. The report shows the extensive work of the Board throughout the year. We wish to thank the individual members of the Board for their time and efforts on the part of our Society.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Secretary

It is difficult to realize that another year has gone by so quickly, and we must again look back over what we have hopefully accomplished in the past year and look forward to what we would like to accomplish in the year to come.

Again, as one peruses the 1971 Final Reports to the House of Delegates, it impresses each and every one with the amount of work that has been done by the numerous committees which are serving KMA at this time. All of these committees have devoted their time toward their work and have done a marvelous job in concluding or carrying on their particular endeavor.

Without the diligent work of the men serving on these committees and the cooperation and liaison between the committees, which is conducted by the Headquarters staff, the KMA would certainly find itself in a difficult situation. Fortunately, we have many good men working on the committees who have done an excellent job, and I would like to commend them on their work.

This has been another year in which KMA has been busy with old problems as well as new ones. One of the areas which we have become very active in and perhaps lead the nation in is that of peer review. As Secretary, I have been fortunate to serve on some of the peer review committee meetings. These have been most interesting, and I feel have been very helpful in giving us an opportunity to help ourselves and our colleagues in KMA as well as those physicians who are not members of KMA in arbitrations as well as giving directions and consultation to some of the problems which arise from the daily management of a busy office practice and care of the patients. The establishment of peer review, I feel, is going to help us keep the quality of medicine high in the State of Kentucky.

I have also as Secretary, as you know, been on the Judicial Council and Executive Committee, as well as the Board of Trustees. These meetings have all been well attended by the participants and their work has, I think, been outstanding. The work of the Judicial Council has become increasingly heavy so that it has been necessary to meet almost every month instead of every three months as we had previously met. This Council, I feel, serves an extremely important service in the Society; and I certainly would urge you to contact us at any time when we may be of service to you.

As always, I would like to commend our KMA staff. They have again done an excellent job throughout the year. Their duties are too numerous to mention, and it is at times amazing how they are able to carry out all of the detail work which is necessary to keep the work flowing smoothly between the various committees and at the Headquarters Office Building. We continue to be very fortunate in that we have an excellent staff and have added new members to this staff within the past year who I feel are going to even yet increase the good work which has been done in the past. I want to emphasize that we must all realize how much work actually goes into arranging all of the committee meetings as well as the Annual Meeting and the Interim Meeting for which our staff is responsible.

It is always interesting to look at the statistics for the past year in regard to the number of meetings in which the Association has been involved. It is interesting to note the comparison between the number of meetings which were attended this year and last year. The Board of Trustees last year met only six times, whereas this year they met eight times. The meetings lasted a total number of 32 hours, and there were 212 physicians in attendance at these meetings. The total mileage covered by the physicians was 30,460 miles.

The Executive Committee met eight times during this Associational year as compared to four times during the last year. There were 63 physicians in attendance this year as compared to 31 last year. There

was a total number of 277 doctor hours and 10,095 miles involved. As regarding the committee meetings, there were 104 committee meetings this year compared to 66 last year. Again, the total number of doctor hours was 1,483 and the total mileage covered 86,936 miles. The total mileage traveled by the Board of Trustees members, Executive Committee and other committee members totals approximately 125,000 which I think again is a very impressive figure.

Not included in the above figures are those out-of-state meetings which were attended. There were 29 KMA representatives at 12 out-of-state meetings. This amounted to 110 days attending out-of-state meetings with 52,103 total miles traveled. This again emphasizes the amount of work which has been done by your representatives in-state as well as out-of-state.

I feel that with all of these figures I will close my report to you. I always like to mention in the report that it is important for you gentlemen who are the elected delegates from your particular areas to attend the meetings and report the action of the House to your societies. Your job is an important one and you are the liaison between this organization and your component societies. As you know, the participation of KMA in more and more programs makes it increasingly difficult for the individual to keep up and maintain his knowledge regarding current medical events. I certainly hope all of us will make an endeavor to keep our societies well informed regarding the actions of the House at this meeting.

Again, I would like to close this report with a vote of thanks to our KMA staff for another job well done and look forward to the coming year.

S. Randolph Scheen, M.D., Secretary

Recommendations, Reference Committee No. 1

The Report of the Secretary was reviewed with special interest concerning the increased workload, the additional number of meetings, and the tremendous number of doctors' hours required in carrying on the functions of the KMA.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Editor

The editors of *The Journal* have met at regular intervals, approximately monthly, throughout the past year. The flow of scientific articles has continued at a gratifying rate, and we feel the quality has maintained itself during the past 12-month period under the capable leadership of Doctor Charles Smith as Scientific Editor.

Doctor Henry B. Asman and Doctor Sam Overstreet have contributed editorial thoughts throughout the year; and the day-to-day management, supervised by Mrs. Betty Hall, has resulted in some "cleaning up" of *The Journal* with attempts made to have the advertising sections front and back, with news, scientific and organizational sections kept as a body intact.

In addition, we have inaugurated a Letter to the Editor column, a Point of View column and a page devoted to the publication of information concerning various specialty departments in our two medical schools. We feel that these have the potential for increasing interest in readership in the future.

The financial status of *The Journal* has been bettered somewhat by the adoption of a new advertising rate schedule in line with the per capita readership figures as provided us from the SMJAB. The deficit as projected for this year will be approximately $18,000.

The Editorial Board continues to feel *The KMA Journal* serves a number of worthwhile purposes for Kentucky physicians and is, as usual, receptive to any ideas which could lead to its increasing usefulness therefore.

Walter I. Hume, Jr., M.D., Editor

Recommendations, Reference Committee No. 1

The Report of the Editor was reviewed. The Editor and his staff are to be complimented for the fine Journal that they have produced, and we specifically congratulate the Editor for a job well done at the end of his first year.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Treasurer

You will find enclosed in your House of Delegates envelope a Statement of Financial Condition of the Kentucky Medical Association as of June 30, 1971, a Statement of the Changes in the Fund Balances, and Condensed Statements of Income and Expense of the Current Fund, Reserve Fund, McDowell House and the Postgraduate Medical Education Fund for the year ending June 30, 1971.

The complete report of audit for the fiscal year ending June 30, 1971, is available to all members of the Kentucky Medical Association at the KMA Headquarters Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky.

The assets of your Association are now approximately $600,000, and the annual budget exceeds one-third of a million dollars.

Keith P. Smith, M.D., Treasurer

Recommendations, Reference Committee No. 1

The Report of the Treasurer was reviewed with the help of a representative of the KMA's auditing firm. The financial affairs for the fiscal year ending June 30, 1971, were reviewed in depth. It was noted that the current fund showing excess income over expense revealed a balance of $102,132. It was pointed out that this large figure is an outgrowth of the dues increase of 1970, and that the Associational year and the fiscal year and the calendar year are quite different in that many items in this figure are already budgeted and will be spent during the remainder of the year 1971.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Delegates to AMA

The AMA Interim Meeting at Boston, Massachusetts, November 29-December 2, 1970, was attended by the representatives of the KMA and your delegates and alternate delegates of KMA members. This meeting was highlighted by the presidential address who recommended AMA must take a more active leadership role and develop health facilities which are fast coming a focal point for our medical services and are being fostered through HEW and government. Doctor Bornemeier stated that as the government enters health care, the costs rise and the local state officials will be confronted with increasing demands for public funds for groups such as organized labor and will be an incentive for administration of national health services. We must keep these medical health facilities under our surveillance. Doctor Bornemeier also made a plea for a shortening of the medical school curriculum and residency training, stating that it should be based on accomplishments.

Among other important actions taken was a reaffirmation essentially of the previous abortion policy. A membership role was created for student AMA representatives. Peer review was reconfirmed with an emphasis being that this is a "must" program which should be developed to the utmost throughout the country in order that we may not be subjected to review and direction from non-medical peers.

Health occupations were prominent in the AMA meeting, with the expressed thought of the House and numerous committees that it is absolutely essential that the allied medical personnel programs be developed to help the shortage of medical manpower which exists and which will exist in the foreseeable future. The House re-affirmed its position of desiring the AMA Board of Trustees continue their quest for some type of medical malpractice insurance coverage for all reputable physicians throughout the country. To date, no medical insurance carrier has been willing to accept a plan. However, under the direction of Doctor Hoffman of the Board of Trustees, this is being vigorously studied and is expected to be resolved by the time you read this report.

The AMA Annual Meeting in Atlantic City was June 20-24. The House was privileged to have the President of the United States address it and heard a stirring speech by him praising the medical profession stating that the governmental health program would be most expensive and making a plea for the American Medical Association to continue to work for total health care throughout the country. He also spoke regarding the present situation regarding use of drugs in this country and requested the medical profession to use great caution in their dispensing of and recommendation of multiple drugs.

The Board of Trustees of the AMA accepted in the name of the physicians of the country the challenge that the President made regarding health care and drug problems in the United States and recommended that the House adopt a resolution that the AMA strengthen and expand its program to combat drug dependence with particular attention to prevention of, identification, treatment, rehabilitation and research in drugs.

The outgoing President of the American Medical Association, Walter Bornemeier, M.D. in his final report to the House described his "Blueprint for the Future." He stated that the ingredients of medical care are cost, quality, and availability. He also pointed out the increasing use of group practice throughout the country and stated that all indications were that this development type of practice would increase.

Doctor Wesley Hall, in his acceptance of the presidency of the AMA, made an inaugural address. He indicated that the AMA should have a constitution convention in order to attempt to streamline our governing process to suit the needs and pace of the twentieth century physicians and its people. The House deferred action on this until 1972 until the information or report will be brought to the House from the Council on Constitution and Bylaws and the Council on Long Range Planning and Development.

Multiple questions of prime importance in the framework of medicine were acted on by the House. Included among them was the question of right to access to medical care. The House elaborated its existing policy regarding the right to access of medical care by adopting this statement: "It is the right of every citizen to have access to adequate medical care but it is the responsibility of the citizen or society to seek it."

Drug and Drug Abuse

In addition to the action taken in direct response to President Nixon's speech to the House of Delegates the House took multiple other actions regarding the subject of drugs and drug abuse.

A report of the Council on Mental Health and its Committee on Alcoholism and Drug Dependence was filed for information of the Association and all constituent members. This report contains multiple recommendations regarding drug and drug abuse.

Terminology and Definitions

With increasing growing use of the term "physician's associate" as opposed to the term "physician's assistant" to describe the new health occupation, the House agreed that the term "physician's associate" should be used only to denote another physician.

Peer Review

Evaluation by practicing physicians of the quality and efficiency of the services performed by practicing physicians. The House noted also that peer review is an all inclusive term of medical review efforts. The House also re-affirmed its position that peer review should be considered a professional function and should be carried out by physicians under the sponsorship of the county and state medical associations. The House also called on all county and state medical societies and the AMA to take an active responsible role in peer review and to document for the information of the public current functioning

procedures and programs which are serving in the interest of delivering good medical care.

Better Health and Better Patient Care

The House was cognizant of the question of maternal and infant care and recommended that a concentration of high-risk infant care programs should be in hospitals which are specifically staffed and equipped to provide optimal care for the new-borns and prematures and all high-risk infants.

Medical societies should be urged "to support education of patients and the public through more extensive and more imaginative programs and to use all available media regarding venereal disease. The House recommended that all constituents of the state medical society establish more active liaison with the school system in order to provide lectures and appropriate educational support regarding personal hygiene, the effects of tobacco and drugs, the question of medical quackery and the role of physicians in maintaining good health." The House also recommended a more liberal attitude regarding house staff members. They recommended that the SAMA projects be more supervised and sponsored. They urged that Congress support and increase Federal aid to medical students.

House Officers and Medical Students

The House commended "those county medical societies which have opened participation opportunities to House Officers" and recommended to county medical societies "that reduced membership dues be provided for House Staff members."

Delegates also resolved:

To request the Board of Directors of AMAERF "to investigate the feasibility of providing financial aid for the continuation and coordination of the SAMA-MECO Project." (Medical Education and Community Orientation)

To "urge that the Congress support increased Federal aid to medical students.

That residency training in community hospitals is worthy of strong and continued support.

To encourage individual state societies to promote community programs in their states to provide facilities or loan programs for students for which the student agrees to return to the community after training.

That individual members of the AMA assume sustaining membership in the Student American Medical Association.

That the AMA offer active support and counsel to the Student American Medical Association for their community health projects."

Additional Actions and Events

The House adopted the report regarding Regional Medical Programs and noted that the AMA should continue to have these under scrutiny as it has been reported in some areas of closed hospital programs which delete the private practitioner.

The House noted the increasing use of foundations for delivery of medical care and accepted this as one means of providing adequate medical care in areas.

The House also noted the increasing pull by the federal government of Health Maintenance Organizations. The House, however, was cognizant and had in its report the fact that this at the present time is only one means of a method to provide medical care and was critical of the government attempt at the present time to insist that this be the predominant type of providing medical care.

The House adopted the report of the Council on Long Range Planning and Development which included these objectives for the AMA:

1. To maintain an active, viable organization representing the majority of physicians in the U. S.

2. To serve as the central coordinating organization of medicine.

3. To serve as the representative of the medical profession in its relations with other health professions, industry, government, labor, consumers and other non-medical organizations.

4. To develop, stimulate and present scientific and professional programs and advances to the profession and public.

5. To continue its historic interest in all levels of medical education.

6. To assimilate recent medical graduates in all levels of medical professional organizations.

7. To promote high standards of quality medical care.

The delegates wish to recognize the assistance provided by the staff of the KMA, the officers of KMA, and other interested KMA members who monitored and provided this report for you.

J. Thomas Giannini, M.D., Senior Delegate

Recommendations, Reference Committee No. 1

The Report of the Delegates to AMA was reviewed. As usual, they traveled extensively and worked long hours on behalf of KMA. We commend them for the manner in which they represented our Society to the AMA.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Executive Director

The Kentucky Medical Association exists to serve approximately 3,000 Kentucky physicians and 3,000,000 other citizens of the Commonwealth. Responsibility for this service, under the guidance of KMA officers, rests with the office of the Executive Director and staff of your Association.

It is sometimes difficult to see the end results of staff activity, but they are ever present. The Annual Meeting is an example; and, indeed, they surface in the reports of all committees contained in this booklet, the publications you receive, the meetings you attend and other medically related functions—and in just some of the daily taken-for-granted occurrences in your life.

Last year, I reported on increased committee activity; while this year, KMA committee meetings were

up 63% over last year. The Judicial Council, for example, has found it necessary to meet monthly instead of quarterly as it recently did. Members of staff planned, attended and implemented the actions of *122* KMA committee meetings in addition to representing the Association at *105* related meetings plus totalling *120* staff days at *15* out-of-state meetings. These meetings are documented and obviously there are others unrecorded. It is interesting to note that this represents more than one official meeting every working day. (This does not take into account daily meetings with two or three people such as convention suppliers, committee chairmen, staff of allied organizations, daily visitors, etc.) As this activity increases, the staff workload rises proportionately and the pressing need for space becomes more critical. These problems, too, are being solved.

Since my last report, an Executive Assistant has been hired to staff a number of our committees and to assume other internal administrative responsibility. This position became effective on March 1.

Expanded activities in peer review have resulted in securing a grant for the hiring of a Coordinator for Claims and Utilization Review activities. The coordinator began his duties in July and, within the first month of employment, had day long workshops scheduled during August and September to provide educational programs for the Regional Claims and Utilization Review Committees.

One reason the administrative activities of a medical association are changing and increasing continuously is due to state and national legislation. No one can predict exactly, but most everyone actively involved in medical society administration will say more space and more people will be needed soon due to new laws that will be passed relating to peer review organizations financed by the Federal Government, medical care foundations, health maintenance organizations and alternative methods of health care delivery, etc.

As of the writing of this report, our building plans for an addition to the Headquarters Office are progressing on schedule. I have had the privilege of staffing the Building Committee, and they have worked tirelessly and with dedication to meet the needs in your best interest. The Committee has made an out-of-state trip to perform an on-site inspection of another state medical association building addition and has held some nine or ten meetings since last September to finalize their recommendations. An "expanded building" will ease an existing crowded situation where five employees are currently without offices, and the building allows some growth in keeping with future needs for both administrative and meeting facilities.

In discussing legislation, it is noted that the Kentucky General Assembly will be in session during the forthcoming Associational year, and we will again have two staff men representing you in Frankfort. To help bring about the best in health legislation, these two men will have the responsibility of reviewing nearly 1,400 bills which will be introduced and of providing information on this legislation to the membership of KMA.

As a new staff man when I was hired ten years ago and now as your Executive Director, I have been most impressed with the rapid growth of your Association's activities and with the many and varied responsibilities added. It seems as we look back, about every five years, we find that about 80% of what we are doing is new. During these past ten years, we have doubled the size of staff, completely outgrown our building and find ourselves with the daily problems that would beset any organization operating on an annual budget in excess of one-third of a million dollars.

Costs are skyrocketing as we can see in construction, conducting the Annual Meeting, printing, postage, supplies, travel and, in fact, in all that we do. Under the guidance of the Treasurer, Budget Committee and other officers, the financial affairs are managed with top priority. Staff is challenged to search continuously for methods of reducing costs and increasing income. I feel we have been quite successful in both aspects.

As the number of our staff grows, so, too, does their enthusiasm and their dedication to duty. I am proud of this outstanding staff pulling together and striving toward the goals established by the members of KMA. They are courteous, efficient and willingly give that extra effort. The staff and I personally are indebted to those officers, Board members and committee chairmen with whom we work so closely throughout the year for their time, counsel and understanding. Our special appreciation is extended to the President, Board Chairman, Secretary, Treasurer and *Journal* Editor whom we seem to contact almost daily.

In turn, it is a pleasure for us to serve the officers and membership of the Association. Our goal is to insure maximum effectiveness in your behalf. We're privileged also to maintain a close liaison with the officers and members of the Auxiliary.

A record of the meetings attended by staff is presented to the Board of Trustees at each of their sessions. Such a list is designed to help keep everyone informed of KMA and staff activity in summary form. A copy of these Headquarters Office reports is being provided each member of Reference Committee Number 1.

Robert G. Cox, Executive Director

Recommendations, Reference Committee No. 1

The Report of the Executive Director was reviewed in detail. We have praise for the Executive Director and for his staff for the many and varied duties that they have performed. We realize that our demands on this staff continue to increase, and we commend them on their abilities to handle our increased workload.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee to the Woman's Auxiliary

The KMA Advisory Committee to the Woman's Auxiliary met early in the Associational year. A review of the structure and organization of the Auxiliary confirmed the need of central staffing for more effective performance.

The Board of Trustees accepted a recommendation for the establishment of the office of coordinator, with salary, with the Auxiliary to select the coordinator, and directed a report of the operations of this office at the end of six months. That report is in the Report of the Chairman of the Board of Trustees.

The Committee commends the Auxiliary for their diligence, dedication and devotion.

George F. Brockman, M.D., Chairman

Recommendations, Reference Committee No. 1

The Report of the Advisory Committee to the Woman's Auxiliary was reviewed, and we note that the Board of Trustees has accepted a recommendation for the establishment of an Office Coordinator, with salary, for the Auxiliary. This Committee commends the Advisory Committee to the Woman's Auxiliary for their work.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution I

KMA Board of Trustees

WHEREAS, "The Distinguished Service Award" of the Kentucky Medical Association has always carried with it a lapel pin as the only visible sign that a physician has been the recipient of this award, and

WHEREAS, the highest award given to honor a Kentucky physician should also include a citation suitably engraved and individually written to portray the qualities of the individual receiving the award, and

WHEREAS, the Awards Committee desires that a citation accompanying the Distinguished Service Award be prepared in advance of the Annual Meeting of the Kentucky Medical Association, and

WHEREAS, it has been the custom that nominations for this award have been allowed from the floor of the House of Delegates, now therefore be it

RESOLVED, that the Board of Trustees recommend to the House of Delegates that the Awards Committee select the recipient of the Distinguished Service Award based upon qualifications submitted with the nomination, and be it further

RESOLVED, that a citation, suitably engraved and individually written, be given along with the present lapel pin to the recipient of the Distinguished Service Award, and be it further

RESOLVED, that this be officially known as the Distinguished Service Award.

Recommendations, Reference Committee No. 1

Resolution I, Distinguished Service Award Changes, introduced by the KMA Board of Trustees, was discussed in detail, and it is our feeling that this resolution completely satisfies the intent of our Society in offering a distinguished service award.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Resolution J

KMA Board of Trustees

WHEREAS, the Awards Committee of the Kentucky Medical Association has diligently pursued their appointed tasks during the past Associational year and have made several worthwhile recommendations, and

WHEREAS, the Awards Committee has recommended that the "Outstanding General Practitioner Award" should be discontinued because the Family Practice of Medicine is now another specialty group, and

WHEREAS, the Kentucky Medical Association does not give awards to representatives of any other medical specialty group, but does present a Distinguished Service Award annually to one of its members, now therefore be it

RESOLVED, that the Outstanding General Practitioner Award be deleted from the list of awards given by KMA.

Recommendations, Reference Committee No. 1

Resolution J, Discontinuance of Outstanding General Practitioner Award, introduced by the KMA Board of Trustees, was reviewed in detail. It was the feeling of the Committee that this award was a duplication of the, "Citizens Doctor of the Year Award," that is presented by the Kentucky Academy of General Practice, and it is our feeling that the award, "Outstanding General Practitioner," be deleted from the list given by KMA.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 1 as a whole.

(Motion was seconded and carried.)

Mr. Speaker, as Chairman, I wish to thank all the members of this Committee for their untiring effort and help in preparing this report.

I would also like to thank Miss Maureen Arendash for her excellent help.

REFERENCE COMMITTEE NO. 1

Winston L. Burke, M.D., Lexington, Chairman

Irving Kanner, M.D., Lexington

Norman A. Parrott, M.D., Paducah

Fred C. Rainey, M.D., Elizabethtown

A. B. Richards, M.D., Louisa

REFERENCE COMMITTEE NO. 2

James O. Willoughby, M.D., Bowling Green, Chairman

Reference Committee No. 2 considered the following reports:

14. Report of the Scientific Program Committee
15. Report of the Scientific Exhibits Committee
16. Report of the Committee on Medical Education
17. Report of the Hospital Committee
 Allied Health Advisory Subcommittee
 Subcommittee on Cononary Care Units
18. Report of the Committee on Educational Television
5. Report of the Chairman, Board of Trustees, paragraph 1 on page 12 only
19. Report of the Disaster Medical Care Committee
20. Report of the Cancer Coordinating Committee
48. Report of the Medicine and Religion Committee
 Resolution A—Licensure of Foreign Medical Graduates (Harlan County Medical Society)
 Resolution F—Funding Departments of Family Practice (Fayette County)

Report of the Scientific Program Committee

The Scientific Program Committee met to plan the 1971 KMA Annual Meeting on October 28, 1970. Preparation of your Annual Scientific Session requires the better part of a year and during that time, your Chairman, Committee members and the KMA staff are involved in numerous phone calls, personal contacts and the voluminous correspondence necessary in putting this program together.

Early in the Associational year, your Chairman and the KMA President had the pleasure of meeting with 17 specialty group presidents to discuss their participation in planning this year's meeting. The Ohio Valley Proctologic Society, representing proctologists from three neighboring states, will join our meeting on a triennial basis. They are certainly most welcome.

The scientific programs of the specialty groups held in conjunction with our general sessions have proven to be valuable to all concerned and provide an outstanding contribution to the continuing education of our members. I am grateful for the approval of the facilities offered for the specialty group meetings and for their cooperation in the planning of the overall program.

Planning for each year's scientific session includes the review of previous programs in an attempt to select the most popular aspects of those sessions to compliment any new concepts presented. The Scientific Program Committee's objective is to present an appealing and educational program that will provide the maximum benefit to the members of KMA.

From prior experience, it has appeared that the selection of themes for portions of the scientific program has proven to be beneficial, and that policy has been carried over into this year's session. The themes are designed to maintain the continuity of the program and afford an opportunity for in-depth coverage of a subject. We hope you again will find them to be profitable.

This year's program will be comprised primarily of individual presentations. A popular feature of the past two meetings, the "Crackerbarrel" Session, will again be presented; however, its format will be altered somewhat and the session renamed "Ask the Expert." This informal roundtable discussion period is scheduled for Wednesday afternoon.

As in the past, the South Central Bell Telephone Company will sponsor our message center in the Technical Exhibit Hall. This continues to be a valuable service to our Association and our membership, and we wish to express our appreciation for it.

Your Chairman is grateful to all those who assisted in the formation of this program with a special note of appreciation to the Committee members, specialty group presidents and program chairmen. Any suggestions our membership might have for future programs would be most welcome.

Allan M. Lansing, M.D., Chairman

Recommendations, Reference Committee No. 2

The Report of the Scientific Program Committee was studied and this Committee is impressed by the efficiency of that Committee in arranging an excellent program. We wish to thank the South Central Bell Telephone Company on behalf of the Kentucky Medical Association for sponsorship of the Message Center again this year.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Scientific Exhibits Committee

It is customary for the Committee on Scientific Exhibits to meet late in the Associational year in order to review applications for scientific exhibit space at the Annual Meeting. Due to this fact, it has become the policy of the Committee to submit a final report prior to the meeting to insure that it will be included with all other Committee reports.

The Committee meeting will be held this year on July 21 at which time we will review all applications which have been submitted and select those which will be presented during the 1971 Annual Meeting.

We would hope to have approximately 15 exhibits for the 1971 Meeting. In order to meet regulations set forth, the exhibits are to be in place in Convention Center by 8:00 a.m. on Tuesday, September 21 and will not be removed until 3:30 p.m. on Thursday, September 23.

Based on past experience, the policy of judging the exhibits will be continued, and an award for first place will be presented at 11:30 a.m. on Wednesday, September 22, during the general session at Convention Center.

All of the scientific exhibitors will be available to discuss their exhibits with you. Each year a certificate

is given to each exhibitor for participating in this phase of continuing medical education. Exhibitors wear special badges and ribbons to identify themselves to everyone at Convention Center.

The Committee on Scientific Exhibits continues to urge all members attending the Annual Meeting to visit the exhibits. It would certainly be helpful if more of our members presented scientific exhibits, and we would urge that you plan toward such a project for the 1972 Annual Meeting.

Benjamin B. Jackson, M.D., Chairman

Recommendations, Reference Committee No. 2

The Report of the Scientific Exhibits Committee was reviewed with interest. The high quality of the scientific exhibits continues to add much to the overall program.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Medical Education

The Medical Education Committee, with its usual active and interested membership, held (essentially) three meetings during the course of this Associational year. The first was held on November 18, 1970, at KMA Headquarters; and at that meeting we introduced new members, explained that AMAERF solicitations would be handled from the national level, and then proceeded pretty directly to planning the affairs of the upcoming KMA Medical Education Conference to be held in January. This occupied a good deal of time, and we laid out the planning in some detail.

The next meeting was the Conference itself; this occurred January 23 and 24 at Park Mammoth Resort, Park City, Kentucky. The Conference revolved around the discussion of four issues which have been developed and planned by Frank Lemon, M.D., and his Conference Subcommittee:

1. The Future Development and Utilization of the Family Practitioner.
2. The Role of the Medical Center in Practice Models for the Experimentation in the Delivery of Medical Care.
3. Medical Schools—Community Hospital Affiliations.
4. Medical Legislation and the Medical Schools.

We were blessed with interesting speakers and equally interested listeners and participants, and the discussion was enthusiastic throughout. The Conference adjourned Sunday at noon, having started Saturday morning with the various discussion groups each having had a say; in particular, the intricacies of the legislative process became somewhat clearer to most of those present. The problems in the development of Departments of Family Practice also became clearer to those who attended, we believe.

The third meeting of the Committee occurred March 18, 1971, and at this meeting the KMA Postgraduate Medical Education Fund was accounted for. (It has some $5,380 on its books.) The Fund was authorized to support, in the amount of $400, the Educational TV Committee for the purpose of continuing medical education.

The status of the Ohio Valley Regional Medical Program was next discussed, and it was pointed out that the emphasis in this program has shifted, from bringing the latest medicine to the periphery, to the "development and effective use of health manpower in ambulatory care." Further discussion revealed that additional emphasis has been placed in planning mechanisms for developing prepaid closed-panel group practice in Lexington, Cincinnati and Louisville, among others.

KMA Faculty Scientific Achievement Award recipients were then discussed, and one was chosen from U of K and U of L Medical Schools. This presentation will be carried forth at the Annual Meeting this year.

The retrospective discussion of the KMA Medical Education Conference at Park Mammoth was next on the agenda, and several motions were made as the result of this Conference and sent to the Board of Trustees for action. First was that the Rural Kentucky Medical Scholarship Fund should change the rules to allow three years of training prior to going into practice, since this was to be the period of training for family practitioners under the current Board concept. This was sent to the Board of Trustees and later approved. Next, the Medical Education Committee considered the request from the participants to have an annual meeting rather than biennial; but recommended, because of the amount of planning and staff time involved, that it be continued on a biennial basis. The Board of Trustees also later approved this.

Next, the Conference on Medical Education had recommended that the Legislative Committee of KMA include a KMA member to represent each of the following: the State Board of Health, the University of Louisville School of Medicine, the University of Kentucky College of Medicine, with voting rights. The Conference also recommended that representatives from each of the two medical schools be invited to attend meetings of the State Board of Health. This was forwarded to the Board of Trustees and later approved. A letter was sent to Dexter Meyer, M.D., President of the State Board of Health, reaffirming the Conference participants' interest in having a representative of both U of L and U of K attending meetings of the State Board of Health.

A note was sent to ask the Legislative Committee of KMA to work toward deletion of the four-year requirement for an M.D. Degree and to convert it in Kentucky instead to "a curriculum approved by accrediting committees of the AAMC and the AMA." It was also agreed that the papers as presented at this conference should be submitted to *The KMA Journal* for possible publication.

The next issue, and really the final issue concerning this committee at this time, was the request from the KMA Executive Committee that this Committee study the concept of "compulsory continuing medical education" and report back to the Board of Trustees prior to its meeting in August. This was the subject

of a good deal of discussion, and the upshot was that this Committee recommend that the membership of KMA should have a say in the development of any such program. Accordingly, we sought the Board of Trustees' approval to utilize an upcoming OVRMP survey which would go to the doctors in this State, with a question to be phrased, "Would you be in favor of KMA's Medical Education Committee developing an anonymous self-assessment program in the interest of defining the educational needs for yourself and your colleagues?"

The final note was that because of the long-range planning needs of the Medical Education Committee, we recommend that membership on the Committee be for a term of three years in a staggered fashion. This was later approved by the Board.

There will be one final meeting in this Associational year on July 15, at which time the self-assessment programs of the various specialty organizations throughout the country are to be evaluated in line with their possible application in Kentucky.

The Chairman thanks the membership of this Committee for its sincere interest and hard work throughout this year and feels that over the period of his several years of involvement with this Committee, it has been a most salutary meeting ground for all those in Kentucky concerned with the concept of continuing postgraduate medical education.

Walter I. Hume, Jr., M.D., Chairman

KMA Representative to the SAMA Chapter University of Kentucky College of Medicine

As previously reported, this representative holds a similar position in the Fayette County Medical Society.

As KMA representative, I have had no contact with the University of Kentucky SAMA Chapter this year. It seems to me that any necessary contact can quite adequately be taken care of through the Fayette County Medical Society rather than KMA having a specified representative. I therefore would like to recommend to the House of Delegates that this position be abolished.

Donald E. Edger, M.D.
KMA Representative to SAMA
University of Kentucky

KMA Representative to the SAMA Chapter University of Louisville School of Medicine

This past current year has found many activities on the part of the SAMA Chapter at the University of Louisville. They have been quite busy and involved in the Greater Louisville Organization for Health, having done some research in the ghetto and poverty areas and finally establishing a neighborhood center in order to do health screening for the underprivileged. Along with this, they had cooperation and partnerships with dental students, student nurses and student social workers in order to form a student health unit for giving a broader base to elementary screening and health cares for the people in the low income areas. This has been endorsed by the Jefferson County Medical Society and by the Medical-Dental School and the Nursing School, and seems to have been well received.

Our delegates, with KMA's assistance, attended the annual Student AMA meeting. At the current time, none of our delegates hold high position but they have been very active in regional work and in their efforts of committees and councils of the national SAMA.

There is general reorganization still occurring in the national SAMA and they are most interested still in medical school curriculi and programs and are now helping to establish a House Officers Association, where there will be some continuity between the undergraduate medical years and the intern-residency years, up until they have come under the organized medicine umbrella when they enter private practice. Some testimony in regard to national legislation also has been done by the national SAMA organization and some of our members have been contributory in this area.

The local chapter continued to meet monthly and supported the general student's platforms, grievances, aids and helps as has been routine.

Some reflection of the general campuses has been felt in some of the medical schools across the country, but it is noticed that the University of Louisville has been one of dedication to learning, dedication to better health care and dedication to the better interest of medicine and could be looked on as a classical example of responsible but thoughtful and dedicated student efforts.

Hoyt D. Gardner, M.D.
KMA Representative to SAMA
University of Louisville

Recommendations, Reference Committee No. 2

The Committee on Medical Education has, in its extensive report, reviewed a number of important topics of interest to the Association. The Reference Committee wishes to call attention to the change in emphasis and direction of the Regional Medical Program at the local and national level. It would appear to be increasingly important to maintain close liasion with this program.

The Reference Committee feels that liaison with the two Student American Medical Association Chapters is quite important and that flexibility in establishing this relationship should be permitted. It is recommended that the Kentucky Medical Association, on an optional basis, delegate the liaison responsibility to the local county society rather than an individual.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Hospital Committee

The KMA Hospital Committee met twice during the Associational year on December 3, 1970, and May 27, 1971. Both meetings were very productive and informative.

During the year, an Ad Hoc Committee was appointed by the Governor to study the problems of Extended Care Facilities in the State. The Committee

met four times during the year with your Chairman serving as head of that group. It was the finding of the Committee that misunderstandings existed on behalf of the public in general, hospital administrators and medical staffs. Meetings between KMA and interested parties continue with the hope of solving some of the existing problems in the program.

There is a possibility that Federal legislation will be introduced which would give hospital-based ECF's greater flexibility in bed utilization. Should this legislation be introduced, we strongly urge the membership of KMA to actively support it as we feel it might be the answer to the untenable ECF situation which now exists.

At the request of the Board of Trustees, the Hospital Committee appointed a subcommittee to act in an advisory capacity to allied health groups under the chairmanship of Lewis Dickinson, M.D., Glasgow. The Allied Health Advisory Subcommittee had its first meeting June 10, 1971, and its report will follow as an addendum to this one.

Last year, we reported on the plans of the Kentucky Firemen's Association to build a burn hospital in Kentucky. Several recommendations were made by the Hospital Committee, but no decision has been made by the firemen concerning the location and type of units that should be built. We were pleased to see the Comprehensive Health Planning Council appoint a study committee to work with the firemen to develop an excellent treatment center in the State for burn victims.

The Committee discussed a proposal of the Bluegrass Regional Health Planning Council to establish a pilot utilization review mechanism. We noted that KMA had already undertaken a similar project on a statewide basis and urge the membership to become active in the many peer review mechanisms now functioning. We feel participation in and encouragement of peer review is vitally important if medicine as we now know it is to survive.

Effective coverage of emergency rooms was a topic of some discussion by the Committee this year. Legislation was introduced in the past session of the Kentucky General Assembly, which would have required the physical presence of a physician 24 hours a day in all Kentucky hospitals with 50 beds or more. The Committee sympathizes with the intent of such a measure but emphasizes its impracticality due to the manpower shortage in several areas of the State.

The Committee recognizes that emergency room coverage can and should be improved in many areas of the State. We have, therefore recommended, in an effort to relieve this situation to some degree, that the Board of Trustees urge all county medical societies and that the Kentucky Hospital Association recommend to all hospitals in the State, that an active on-call roster be established in all hospitals.

Again this year, the "Dry Run" Hospital Accreditation Team was available to hospitals in the State. With the implementation of the new Standards for Hospital Accreditation, it is anticipated that these teams will be very active in the near future. We wish to express our appreciation to the individuals serving on these teams for their continuing enthusiasm and participation.

The KMA Hospital Subcommittee on Coronary Care Units, under the chairmanship of Henry Post, M.D., Louisville, did not find it necessary to meet this year. However, the subcommittee continues to be available for any particular situation concerning coronary care units.

As my final act as Chairman of this Committee, I would like to thank KMA for the opportunity of serving in this capacity for the past 12 years. New responsibilities in my county society make it necessary to relinquish some of my duties at the state level. It has been a rewarding experience for me personally and I hope I might have rendered some service to the membership. I would like to thank each Committee member for their time and effort in making my association with them an extremely enjoyable one.

James B. Holloway, M.D., Chairman

Allied Health Advisory Subcommittee

The Allied Health Advisory Subcommittee was appointed this year through the Hospital Committee to initiate and maintain liaison with allied health organizations. Although appointed in the latter part of the Associational year, we had one meeting with the Professional Practice Committee of the Kentucky Nursing Association, and the main item of discussion revolved around several proposed joint statements of policy. These statements have been referred to the Hospital Committee and will be considered at their first meeting next year for recommendation to the Board of Trustees, so policy can be established.

Hopefully, our focus will be expanded to include several other allied health organizations in the near future to establish a forum for discussion of matters of interest and importance to all disciplines of medicine, particularly in the area of legislation. Since the Kentucky General Assembly will convene in January, we anticipate a busy schedule next year.

Lewis Dickinson, M.D., Chairman

Addendum to the Final Report of the Hospital Committee

On June 10, 1971, the Allied Health Advisory Subcommittee of the Hospital Committee met with the Professional Practice Committee of the Kentucky Nursing Association. The Nursing Association presented a number of statements for approval of the Subcommittee and Hospital Committee for referral to the Board of Trustees and House of Delegates for policy action.

Your Chairman did not deem it necessary to call another meeting of the Hospital Committee in late summer but felt that the statement on the administration of an anesthetic should be acted upon by the 1971 Session of the House of Delegates. (A copy of this statement is below.)

The Kentucky Society of Anesthesiologists and the

Nurse Anesthetists were first contacted for their comments. After receiving favorable approval from both societies, your Chairman then asked that all members of the Hospital Committee vote on the statement. The members were polled by mail and the tabulated results were unanimously in favor of the proposed statement.

The Hospital Committee therefore urges, with the backing of the aforementioned groups, that the KMA Board of Trustees recommend approval of this statement to the House of Delegates.

The Committee further recommends that upon final approval of this statement, The Kentucky Board of Licensure be requested to change their regulations through the Legislative Research Committee to reflect the content of this statement on nurse anesthetists.

James B. Holloway, Jr., M.D., Chairman

Joint Statement on Administration of Anesthetic by a Nurse Other Than a Nurse Anesthetist Kentucky Nurses' Association Kentucky Medical Association

There is a practice in some areas of the State of Kentucky of allowing unqualified persons to administer anesthetics. According to an article in *The Journal of the Kentucky Medical Association* published in April, 1968, by William E. Hopkins, M.D., entitled, "A Survey of Current Anesthetic Practice in Kentucky," which is a report from a questionnaire mailed to all hospitals belonging to the Kentucky Hospital Association, anesthesia coverage in parts of the State does not ensure safe, quality patient care and is far from adequate.

Only 15 of the 76 hospitals in which obstetrics is practiced indicated that a physician other than the obstetrician was present during obstetrical anesthesia. Obstetrical coverage on the whole leaves much to be desired throughout the State, except in the larger populated areas. Something is amiss when the obstetrical service of a hospital must depend on lay personnel to give obstetrical anesthesia. A hospital administrator added this comment, "OB anesthesia, 24 hour coverage, a constant 'thorn'." It is the patients in our smaller hospitals that suffer from the lack of trained anesthetists and anesthesiologists.

Who is qualified to administer anesthesia is a question we asked the Joint Commission on Accreditation of Hospitals.

The person giving the anesthetic, whether he be a physician or a C.R.N.A. must be qualified to give that anesthetic. The hospital staff must judge the person and determine whether he or she is qualified to give anesthetics. What the person is qualified to do should be delineated.

To give anesthetics, the person must be qualified by training and experience to give anesthetics and that these qualifications have been carefully investigated by the appropriate authorities in the hospital.

A registered nurse who gives an anesthetic to a patient assumes all the legal responsibilities that an anesthesiologist, a C.R.N.A. or a physician assumes in performing the same task. The Joint Commission on Accreditation of Hospitals insists that in order to give anesthetics, the person must be qualified by *training* and *experience to give anesthetic*s and that these *qualification*s have been carefully investigated by the appropriate authorities in the hospitals. The JACH Manual states that a hospital should never allow anyone but an anesthesiologist, a C.R.N.A. or a qualified physician to give anesthetics in the hospital.

Malpractice implies negligence in the care of a patient or failure to employ methods, agents, or skill ordinarily considered appropriate. One definition of the duty of the anesthesiologist and the standards of care have been set forth as follows: "persons undertaking to administer anesthetics in the course of medical or dental treatment . . . are not insurers against harm nor guarantors of a favorable result, but are required to exercise ordinary or reasonable care of skill under the circumstances, that is . . . the skill and diligence of the ordinary person engaged in similar practice at the time, and in the locality where the defendant undertook to act."

Proof of malpractice can be established in several ways. The most common requirement is that the plaintiff produce expert testimony *establishing the standard of medical care applicable to the speciality involved.*

During anesthesia, the anesthesiologist must exercise reasonable care in the protection of the patient against injury. In the event that the anesthesiologist employs new techniques, equipment or agents, he should be able to substantiate the fact that he is familiar with these and understands the complications that may arise from their use.

(Introduction to Anesthesia—Dripps/Eckenhoff/Vandam.)

In view of the above information and looking at the preparation and training of the registered nurse, we firmly believe that it is wrong for a registered nurse who has not been certified in an approved school of anesthesiology to give an anesthetic to any patient, either surgical or obstetrical. Professionally she is not trained to execute the function, legally she is not licensed for this duty, and due to the shortage of Nursing Personnel, she cannot give adequate patient care if she is trying to be a "physician" too.

Therefore, we state that an anesthetic should be given *only* by a qualified, prepared individual such as an anesthesiologist, a physician, a dentist or a C.R.N.A.

BOARD ACTION: Your Board recommends approval of the report of the Hospital Committee but does not concur with the recommendation in the Addendum to the Hospital Committee's report relating to the Joint Statement on Administration of Anesthetic by a Nurse other than a Nurse Anesthetist.

Members of your Board recommended that the entire statement be deleted with the exception of the first paragraph and the second sentence of the sixth paragraph which reads as follows: "The Joint Commission on Accreditation of Hospitals insists that in order to give anesthetics, the person must be qualified by *training* and *experience to give anesthetics* and that these *qualifications* have been carefully investigated by the appropriate authorities in the hospitals." The Board then recommends the adoption

of the first paragraph and the above quoted sentence of the sixth paragraph plus the following addition: "In view of the foregoing, we firmly believe that a nurse who has been qualified by neither practical training and experience nor certification through an approved school of medicine should not be permitted to give an anesthetic to any patient (surgical or obstetrical) and that certification instead of practical training and experience should be the preferred method of qualification in the future."

Recommendations, Reference Committee No. 2

The Report of the Hospital Committee was reviewed. The Reference Committee wishes to commend the members of the Hospital Committee and to call attention to the House of Delegates of the 12 years of continuous and faithful service that Doctor Holloway has provided in his capacity as Chairman of the Committee.

The Reference Committee recommends acceptance of the Hospital Committee's report relating to the Joint Statement on Administration of Anesthetic by a Nurse Other Than a Nurse Anesthetist as modified by the Board of Trustees on August 5, 1971. The Reference Committee continues to be concerned about the qualifications of certain individuals who may be administering anesthesia in Kentucky and, therefore, hopes that the Hospital Committee will continue in its efforts to upgrade the level of patient care in this field.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Educational Television Committee

The Educational Television Committee met five times during the Associational year, in its continuing efforts to study the use of television as a tool in medical education. The Committee's greatest involvement at this time is in the presentation of the medical portions of the PANMED television series which is broadcast weekly on the Kentucky Educational Television Network. Programs directed to physicians have been presented at approximately monthly intervals throughout the broadcast season. Other programs in the PANMED series are directed to nurses, dentists, pharmacists, and other allied health workers. Programs this year have consisted chiefly of taped presentations in many cases followed by discussions of the topic presented in the tape. These discussions have been presented by members of the faculties of the University of Kentucky and University of Louisville Schools of Medicine and have involved practicing physicians in the State of Kentucky. The fall series of programs and the spring series of programs were promoted individually by mailing to every physician in the State of Kentucky and each program in the series was promoted individually by special mailings to physicians in the State of Kentucky. These promotion pieces included a study guide which serves as an aid in understanding the program and as a help for review. Study guides generally include a bibliography related to the subject.

To determine the effectiveness of the programs, a survey was conducted by a mailing card enclosed with the *Communicator*. Response was received from approximately 10% of the cards and the figures indicated that one out of four physicians are viewing all or part of the series. This figure is approximately the same as that obtained by Doctor Kemper and his survey of the programs done at the middle part of last season. Response to the question, "Should KMA continue to support the series?" was affirmative, approximately 3-1 among those physicians answering the question. Many comments were made by respondents to the questionnaire which are being considered by the Committee. These include questions concerning the desirability of open broadcast of medical subjects and the value of television as an educational tool. The Committee is well aware of these limitations and has considered them. These may be, at some time, sufficient reasons to cause discontinuing the series.

Budgetary considerations—production of programs and promotion of programs in the past has been financed by grants received from various voluntary health agencies. Major support this year has come from the Kentucky Division, American Cancer Society which contributed $2,500 to be used in the series. In addition, the Kentucky TB and Respiratory Disease Association spent approximately $1,500 in promotion and production of the program on Spirometry and Chronic Respiratory Diseases. The grant from the Kentucky Cancer Society has been renewed for the coming year. It is the feeling of the Committee, however, that educational television directed at physicians represents a considerable expenditure of money and if physicians feel that this expenditure is justified, the time has come for the physicians, through their professional organization, to indicate their support of the program and to include this program in its budget. The budget for the first year of operation was $5,000; the budget for this year's operation was $4,000 plus an approval for expenditure of funds from the KMA Postgraduate Medical Education Fund. This was the result of a special request to allow distribution of the study guides on "Transient Ischemic Attack." A small portion of these funds were expended. The Committee feels that a budget of $6,000 will be required in the future to allow sufficient funds for adequate promotion, program preparation and involvement of more Kentucky physicians in local production of the television series. It recommends that KMA appropriate sufficient funds from such sources as the Board of Trustees deems advisable to complete the budget for next year. This would require $3,500 and that in ensuing years the budget of this Committee be included in the general budget of the Association as prepared.

Plans are currently under way for next year's broadcast season. Promotion will be carried out as funds of the Committee permit. An experiment in programming will likely develop using a concept of

"block" programming, giving medical education one month of the year, broadcast once each week throughout that month in the spring and the fall, the other months given over to the other participating professions. The Committee is most appreciative of comments of practicing physicians concerning the usefulness and advisability of these programs.

Thomas L. Heavern, Jr., M.D., Chairman

BOARD ACTION: Approved.

(Special consideration was given to this report and a subsequent recommendation made which is contained in the Minutes of the Board of Trustees and which will be referred to the same reference committee as this report.)

Report of the Chairman, Board of Trustees, Paragraph on ETV PANMED Series

Another subject that received a lengthy discussion was the matter of the KMA Educational Television Committee and the ETV PANMED Series that have been run over the Kentucky Educational Network during the last couple of years. The Board noted that a recent survey had been conducted which firmly demonstrated that there was very little viewing of the Series, while costs of showing them continued to rise. It was noted that this year's report specifically asked for $6,000 from KMA at a time when a building addition and other matters call for judicious spending of KMA's funds. In view of the low number of members watching or expressing an interest in the ETV Series, your Board of Trustees recommends that the Educational Television Committee be discontinued with the understanding that any of its particular functions worthy of pursuing can be assumed by the Committee on Medical Education.

Recommendations, Reference Committee No. 2

The Report of the Committee on Educational Television was reviewed with considerable interest in conjunction with the modifying statement contained in the Board of Trustees report as prepared on August 5, 1971. Extensive testimony supporting the concept of educational television was heard from participants in this program. It is the opinion of the Reference Committee that the Educational Television Committee should be continued and encouraged in its efforts. The Reference Committee believes that educational television will play an increasingly important role as a result of greater emphasis on continuing education, particularly as it may become mandatory in the future. The Committee recommends that the Board of Trustees re-evaluate its position in regard to financing the PANMED series.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Disaster Medical Care Committee

The Disaster Medical Care Committee met on two occasions during the past year. The attendance of the majority of the members was generally good and the Committee members spent considerable time during the past year in the development of programs. The following list of projects is not necessarily in the order of significance.

The Committee concerned itself about the disaster medical care plans for the commercial airports in the Commonwealth of Kentucky. Subsequently, a letter was sent to airport managers and to the president of the medical society adjacent to commercial airports asking about the availablity and rehearsal of disaster plans. Replies were received from the majority of airports. All of the managers who did reply indicated an interest in the development of a satisfactory disaster plans; and it was apparent that some had disaster plans, and some were in the process of developing plans, but it would appear that these plans have not been rehearsed and that commercial airports and the nearby communities need to coordinate their activities for the effective care of disaster victims.

A one-day meeting with a training program for emergency department nurses was held in conjunction with the Kentucky Chapter, American College of Surgeons. This meeting was extremely successful. Over 200 nurses attended. A registration fee was charged. Because of the enthusiastic response, plans are being made to have another meeting in 1972. The meeting will probably last for a day and a half.

Considerable time was spent on the problem of transportation of emergency medical patients. This service continues to deteriorate. Several meetings were held with Colonel Rhein at Fort Knox for the availability of helicopter service for transportation of emergency medical patients. At this time, there is no likelihood of a continuing program being available in Kentucky for a number of reasons. The availability of fixed-wing air service for emergency medical patients is now being investigated.

A meeting on Emergency Medical Services was held by the Ohio Valley Regional Medical Program, the West Virginia Regional Medical Program, the Kentucky Comprehensive Health Planning Council and the West Virginia Comprehensive Health Planning Council at Carter Caves on the 21st and 22nd of May. The Chairman of your Committee and several members of the Kentucky Medical Association participated in this program.

A legislative proposal has been drawn which would regulate ambulance service in Kentucky. This proposal would require a standard vehicle with equipment as recommended by the College of Surgeons and with trained ambulance attendants.

As a result of the Kentucky Medical Association's request to the Governor, a Comprehensive Health Planning Committee was appointed and met several times in the past year. Your Chairman and many members of the Kentucky Medical Association participated in this Committee activity. The recommendations of the Committee are attached.

A program to improve the capability of ambulance technicians is being developed by the Kentucky Health Department. If this program is approved, members of the Kentucky Medical Association will be requested to participate in the training of Emergency Medical Technicians-Ambulance.

The tornadoes which struck Southcentral Kentucky resulted in the deaths of a large number of Kentuckians and injuries to many more. Reports from the physicians in that area have been received by the Committee and are available. It would appear that because of good advance planning, the morbidity and mortality were held to a minimum.

The Committee recommended to the Board of Trustees that consideration be given to the development of a program of physician coverage for emergency care for the General Assembly during its session.

The Kentucky Medical Association has tried on several occasions to develop relationships with the Kentucky Junior Chamber of Commerce about emergency medical service which is receiving considerable attention from the Internal Revenue National Office. Unfortunately, this relationship has not developed effectively as yet.

The Communications System for Emergency Medical Services in Eastern Kentucky continues to prove its value. It is strongly urged by the Committee of the Kentucky Medical Association with the Committee of the Kentucky Hospital Association that emergency medical services communications be extended across the Commonwealth.

The Highway Hospital Sign Program for Kentucky continues to be implemented, is well received and has been a source of service to patients and ambulance attendants.

Although the Kentucky Medical Association has been opposed to good samaritan legislation in the past, it would appear that this program has support from other agencies in the Commonwealth who are interested in emergency medical services. It would appear reasonable to ask the Kentucky Medical Association to meet with other interested agencies to discuss the feasibility of such legislation before the next legislative assembly.

Preliminary communications have been held about the development of first aid training programs for service station attendants in Kentucky.

The Chairman wishes to take this opportunity to compliment the staff of the Kentucky Medical Association for their efforts. If an effective program is to be developed, however, it is apparent that more administrative help will be necessary.

William T. Rumage, Jr., M.D., Chairman

Recommendations of Doctor Stine's Emergency Care Study Committee

1. That third-party purchasers be urged to provide coverage for emergency transportation for their beneficiaries, i.e., Medicare, Medicaid, Blue Cross, etc.
2. That Health Department staff undertake the further typing of health facilities in accordance with their emergency department capabilities.
3. That the statewide communications plan developed by Health Department staff be approved for implementation based on local need.
4. That the Council go on record to indicate that emergency medical services is a local responsibility, and that regional planning councils encourage the establishment of necessary programs for emergency medical services.
5. That a statewide training program, based on the Department of Transportation's 81-hour course entitled "Basic Training Program for Emergency Medical Technician-Ambulance" be offered to all personnel currently involved in the provision of emergency transportation (to start September, 1971).
6. That Emergency Health Services staff meet with any county, regional or other group requesting assistance with emergency service problems; and provide such statistical, health resources and other information as might be necessary, along with an evaluation of local needs, to enable such groups to determine, at the local or regional level, the most feasible method of providing emergency services.
7. That the Council recommends to appropriate authorities that emphasis be placed on the prevention of accidents through the utilization of reflecting license plates, emergency medical insignia, etc.

Recommendations, Reference Committee No. 2

The Report of the Disaster Medical Care Committee was reviewed with interest. The Committee is to be commended for its continuing efforts in activities in this field.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Cancer Coordinating Committee

Three years ago, the Cancer Coordinating Committee was established to follow-up and coordinate cancer reporting in the 14 approved Kentucky hospital cancer registries and the State Cancer Registry.

No specific requests have been made of the Committee this year; consequently, no meetings were held.

Ralph M. Scott, M.D., Chairman

Recommendations, Reference Committee No. 2

The Report of the Cancer Coordinating Committee indicates inactivity during the past year. In view of this, the Reference Committee recommends to the Board of Trustees that they re-evaluate the desirability of continuing this Committee.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Medicine and Religion Committee

The KMA Medicine and Religion Committee met three times this Associational year and was pleased to have several guests in attendance representing the Kentucky Hospital Chaplain's Association.

In addition, your Chairman had the pleasure of continuing at the national level as a member of the AMA Committee on Medicine and Religion, traveling to Atlanta and Chicago for meetings of that group. On the state level, I had the honor of addressing the Kentucky Hospital Chaplain's Association in March and spoke to ministerial associations in Lexington, Ashland, and Georgetown.

The KMA Committee on Medicine and Religion has directed its efforts, this year, to the establishment of a better working relation with the theological seminaries in Kentucky. Questionnaires were sent to all Kentucky seminaries to determine if the Committee could be of assistance in developing or maintaining courses in clinical pastoral training. We were pleased to learn that there was considerable interest in establishing such a dialogue on the part of the seminaries and we feel that this type program will create a better understanding between the physicians and the clergy resulting in the total treatment of the patient.

The Committee also discussed the possibility of becoming active in the establishment of state and county sponsored Medicine and Religion Programs and noted with interest the awareness being shown in many areas of the country in this type of activity, and requests the Board of Trustees to give the Committee on Medicine and Religion full exposure and support via educational television, orientation programs, Woman's Auxiliary and county society programs.

We are of the opinion that a great deal can be derived from a closer physician-clergy relationship, but feel that priorities must be established so meaningful discussion can take place. The University of Kentucky and University of Louisville Medical Schools have expressed a desire to work with our Committee and we are pleased to note the interest shown in medicine and religion by them.

At the July session, a subcommittee was formed to work with a physician-clergy committee of the Kentucky Hospital Chaplain's Association. The subcommittee hopes to outline seminars for physicians, chaplains and other interested parties in the State to offer an opportunity for these individuals to discuss common problems and goals, hopefully, so some joint definitive action can be taken.

To produce such a program properly, sufficient funds will be needed, thus, the Committee respectively requests that the House allocate a budget for $500 to underwrite the expenses of such a venture. Certainly, any program of this nature would first be presented in detail to the Board of Trustees for their approval before being finalized.

The Medicine and Religion Committee feels that this will prove to be an excellent public relations mechanism by emphasizing the clergy and medical profession's concern for the total health of the patient.

In closing, I wish to express my deepest appreciation to the Committee members and representatives of the Kentucky Hospital Chaplain's Association for their time and unselfish contributions this Associational year.

J. Campbell Cantrill, M.D., Chairman

BOARD ACTION: Approved. The Board wishes to point out that it has taken final action on the request of the Committee for funds by authorizing said funds out of the Board's emergency budget.

Recommendations, Reference Committee No. 2

The Report of the Medicine and Religion Committee was reviewed. The Reference Committee commends the Medicine and Religion Committee for its developing liaison relationships with numerous organizations and religious bodies.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution A

Harlan County Medical Society

WHEREAS, a foreign medical graduate must file "first papers" for citizenship before applying for a limited license in Kentucky, and

WHEREAS, to file first papers an individual must gain an immigrant visa for which he must often wait many years during which he cannot practice his profession in Kentucky, and

WHEREAS, other states are relaxing certain requirements, while the Commonwealth of Kentucky is placed at a disadvantage in the competition to obtain the services of well-qualified foreign medical graduates by the citizenship requirements of existing Kentucky medical licensure laws, now therefore be it

RESOLVED, that the Kentucky Medical Association recommend to the State Legislature that citizenship or the filing of first papers be eliminated as a requirement for licensure to practice medicine in the Commonwealth of Kentucky, and be it further

RESOLVED, that the Kentucky Medical Association recommend to the State Legislature that the requirements for a limited license, with respect to examination, be changed to accept either an examination by the Kentucky State Board of Health or a valid license in another state of the United States.

Recommendations, Reference Committee No. 2

Resolution A, dealing with licensure of foreign medical graduates, was reviewed in considerable detail by the Reference Committee. Extensive discussion was held. The Committee does not recommend adoption of this resolution, since substantial additional study is required and is, in fact, underway by the Board of Trustees, the State Board of Health, and the KMA Legislative Committee. A number of technical questions were encountered in reviewing the

specifics of this resolution which can be more appropriately resolved by the joint consideration of the aforementioned groups. The Committee endorses the objectives of this resolution, but recommends its acceptance for information purposes only to be considered by the Board of Trustees and the Legislative Committee.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

During the discussion of this resolution, a motion was made, seconded, and passed to add to the Reference Committee report above the words, "and to urge early attention to this matter so that action can be taken when the Legislature meets early next year." The original motion was then adopted as amended.

Resolution F

Fayette County Medical Society

WHEREAS, there is great public demand for more family physicians to provide primary medical care, and

WHEREAS, the Fayette County Medical Society, the Kentucky Academy of General Practice and the Kentucky Medical Association have in the past called attention to this and urged the development of strong programs at both of Kentucky's medical schools to train more family physicians, and

WHEREAS, the Legislature in 1970 mandated the development of Departments of Family Practice in the medical schools of the University of Kentucky and Louisville, but provided no additional funds with which to support such a new development, and

WHEREAS, the University of Kentucky has completed preliminary planning and is ready to activate the William R. Willard Department of Family Practice, but is without sufficient funds to attract a competent faculty or develop the needed facilities for the department; therefore be it

RESOLVED, that the Kentucky Medical Association call upon the 1972 Legislature, and the newly elected Governor of the Commonwealth, to take those urgent fiscal steps necessary to provide sufficient funds for both universities to undertake at once the development of excellent Departments of Family Practice.

Recommendations, Reference Committee No. 2

The Reference Committee recommends the adoption of Resolution F, concerning funding departments of family practice, with the request that the House of Delegates amend the resolution as follows: Strike the fourth WHEREAS and insert, "WHEREAS, the University of Kentucky has completed preliminary planning and authorized the creation of the William R. Willard Department of Family Practice, and the University of Louisville has authorized a similar department, and both institutions are without sufficient funds to attract a competent faculty or develop the needed facilities for the departments; therefore be it . . ."

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 2 as a whole as amended.

(Motion was seconded and carried.)

As Chairman of Reference Committee No. 2, I wish to express appreciation to the members of the Committee for their cooperation and help in consideration of the matters brought before this Committee.

REFERENCE COMMITTEE NO. 2

James O. Willoughby, M.D., Bowling Green, Chairman
Robert M. Blake, M.D., Maysville
Peter P. Bosomworth, M.D., Lexington
C. Douglas LeNeave, M.D., Mayfield
Robert G. Overstreet, M.D., Louisville

REFERENCE COMMITTEE NO. 3

Robert L. McClendon, M.D., Louisville, Chairman

Reference Committee No. 3 considered the following Reports:

23. Report of the Committee on Occupational Health, Physical Medicine, and Rehabilitation

25. Report of the Maternal Mortality Study Committee

31. Report of the Committee on Legislative Activities

32. Report of the Committee on Orientation

33. Report of the Committee on Health Careers

36. Report of the Cults Committee

47. Report of the Interspecialty Council

5. Report of the Chairman, Board of Trustees, Ad Hoc Committee on Cults Report only

Resolution C—Professional Services in Competency Hearings (Fayette County Medical Society)

Resolution L—Physicians on City County Health Department Boards (Jefferson County Medical Society)

Resolution Q—Kentucky State Medical License (Floyd County Medical Society)

Report of the Committee on Occupational Health, Physical Medicine and Rehabilitation

The Committee on Occupational Health, Physical Medicine and Rehabilitation held one Committee meeting during the Associational year on February 24, 1971. There was one other meeting scheduled, but due to numerous conflicts, we were unable to get a quorum for that meeting.

During the year, the Committee reviewed the proposed standards of the Kentucky Occupational Therapy Association. This was done at the request

of the Board of Trustees. The Committee made several proposals for changes in the standards and made a report to the Board of Trustees with their recommendations. The recommendations were studied and forwarded to the Kentucky Occupational Therapy Association with a cover letter from Lee C. Hess, M.D., Chairman of the Board of Trustees.

During the year, the Committee attempted to keep as up-to-date as possible with changes which are taking place due to the "Occupational Safety and Health Act of 1970." This program established enforcement of occupational and health standards on a national level. The Department of Labor will provide penalties for those in violation of the law. Kentucky will have some authority in providing plans for a safe and healthful employment.

It was the feeling of the Committee that there would be no suggestions for changes in the Workmen's Compensation Laws during this year. However, some members of the Committee did request that last year's recommendations be sent to them for their study and any additional suggestions they might have for possible changes in the Workmen's Compensation Laws during the next session of the General Assembly.

As in the past, the Committee continues its interest in seeing that workers who are injured on the job are rehabilitated to the fullest extent possible, so they can become requalified for employment.

The Chairman is grateful for the time and effort expended by the Committee members this year.

John E. Eckerle, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Occupational Health, Physical Medicine, and Rehabilitation was reviewed. We would like to express our appreciation to this Committee for its continued work in this field.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee of the Kentucky Medical Association has continued to meet when the number of cases has warranted. When the meetings are held, the physician whose case is to be discussed is notified that it will be discussed anonymously; and he is encouraged to attend the meeting, if possible, to add any comments that he might have. The cases are discussed one year or longer after the death occurred to avoid any medical-legal involvement. The appropriate teaching cases are then published in *The Journal* with the editorial comments intended for constructive purposes only.

John A. Petry, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Maternal Mortality Study Committee was reviewed by this Committee. We would like to commend the Maternal Mortality Committee members for their continued and effective work.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Legislative Activities

National Affairs

The Committee on Legislative Activities met three times this Associational year. During this time many things of extreme importance were under consideration because, this time, as has been in the past decade, numerous concerns of a national legislative nature have come before our purview. Supplementary to this report you will find material for your information. Of particular importance are three things that directly concern physicians in their everyday practice and with which they should become extremely familiar.

The first is the AMA Medicredit legislative proposal, and knowledge of this legislation, as well as its mechanics, is extremely important. Of all the proposed national health voluntary or compulsory programs, this is the one that has 150 sponsors from the House and Senate. No other legislation thus far submitted is a close rival in this number of sponsors. We are also pleased to report that from Kentucky, Congressmen Snyder, Carter, Stubblefield and Watts are co-sponsors of this bill. The possibility of this legislation being passed is of extreme importance to the profession because it does invoke the priorities of doctor-patient relationship, the voluntary system and responsibilities, both in behalf of the physician and in behalf of the patient.

AMA is also submitting separate pieces of legislation to solve some of the other problems in regard to health manpower and in regard to quality health care and better distribution of services. These particular pieces of legislation are incorporated in and appeared in view of legislation sponsored in revised form by Senator Bennett from Utah. The health maintenance organization, which has to do particularly with distribution in areas and stress in regard to appropriate number or availability of doctors and the financing means, and, of course, the manpower legislation introduced in order to help medical schools and medically related facilities, are getting broader support. The supplementary forms show other specifics in regard to current legislation by the bill number as of June 25, 1971.

It is a pleasure to report on our annual Washington legislative visit. We were honored and privileged to have both Senators Cook and Cooper, as well as our Congressmen Watts, Stubblefield, Natcher, Snyder, Carter, Perkins, and Mazzoli, present for this occasion. A new format was invoked in order to get the most time and services from the volunteers who gave of their time and efforts in order to enhance

solutions to the problems confronting doctors and medicine in Kentucky. This was the all-time record number of people in attendance, for which your Legislative Committee members were appreciative and grateful. It is felt that this was most worthwhile and reaction from our elected representatives and their administrative assistants, who also attended the function, was generally that this was the highlight of their year in regard to constituencies that call upon them.

Because of the import of all of the legislation confronting us, particularly due to the national health insurance programs proposed, the health maintenance organizations and health manpower, if there is ever any time for the extra step in behalf of physicians regarding their own futures and the future of generations yet to come, now is the time. We cannot afford the luxury to let this pass in a nonchalant or a casual, indifferent manner because it is going to require the inspirational efforts of each member and dedication to the cause and purpose, such as we have not had before, in order to maintain quality health care for all our people at a price that they can afford. This is also necessary to exempt them from legislative fiat of servitude, which will allow them no choice, at a high price, and the quality will not be assured or even casually understood. This applies to you, and each of you should be an evangelist to carry this message back home, not only to your fellow practitioners, but to friends, allies, and patients because they, too, must have understanding in depth of the magnitude of this confrontation.

The Chairman expresses appreciation to the leadership of KMA for the opportunity to have served and also to the Committee members for their dedicated and purposeful efforts in behalf of all physicians in Kentucky.

Hoyt D. Gardner, M.D.
Chairman for National Affairs

STATUS OF SELECTED MEDICAL LEGISLATION

As of June 25, 1971

BILL NUMBER	DESCRIPTION	STATUS
	SUBJECT: NATIONAL HEALTH INSURANCE	
H.R. 22 (S. 3)	Health Security Act: Compulsory health insurance financed through payroll taxes and general revenues.	Senate Hearings
H.R. 177	National Health Care; Catastrophic Costs: Coverage for poor in Federal-State financed programs; catastrophic coverage for all.	House Ways and Means Committee
H.R. 817	National Catastrophic Illness Protection Act: Federal reinsurance for carriers of catastrophic coverage.	House Ways and Means Committee
H.R. 4349 (S. 1490)	National Health Care Act: Tax incentives for voluntary prescribed coverage; insurance support for poor.	House Ways and Means Committee Senate Hearings
H.R. 4960 (S. 987)	Health Care Insurance Act: Tax credits (or vouchers) to finance voluntary insurance; including catastrophic coverage.	Senate Hearings
H.R. 7741 (S. 1623)	National Health Insurance Partnership Act: Mandatory insurance by employers for employees and families; federal coverage of low-income families. (Administration Bill)	House Ways and Means Committee Senate Hearings
S. 836	National Health Insurance and Health Services Improvement: Medicare benefits to everyone regardless of age.	Senate Hearings
S. 1376	Catastrophic Illness Insurance Act: Catastrophic coverage, based on Medicare, for persons under 65.	Senate Hearings
	SUBJECT: MANPOWER	
H.R. 4170 (S. 935)	Physician Manpower Support and Services Act of 1971: Expansion of education facilities and support for HMO's.	House Interstate Committee
H.R. 7736	Health Professions Loan and Scholarship Program: One-year extension of program.	House Passed
H.R. 8629	Comprehensive Health Manpower Training Act of 1971: To extend and expand medical facilities construction grants and student loan and scholarship program.	House Reported
H.R. 8630	Nurse Manpower Training Act of 1971: Financial assistance to students and schools of nursing.	House Reported

S. 934	Health Professions Educational Assistance Amendments of 1971: To extend and expand medical facilities construction grants and student loan and scholarship program.	House Ordered Reported

SUBJECT: GENERAL

H.R. 1	Social Security Amendments of 1971: Modifies Medicare, Medicaid and Maternal and Child Health programs.	House Passed
H.R. 437	Pure Drinking Water Act: Federal standards for purity of drinking water.	House Hearings
H.R. 1093	National Water Hygiene Act: Provides federal standards for water for drinking, recreation and other uses.	House Hearings
H.R. 1545	Medical Device Safety Act of 1971: To provide for classification and standards for medical devices.	House Interstate Committee
H.R. 5615 (S. 1182)	Health Maintenance Organizations Assistance Act of 1971: To assist in establishment and expansion of HMO's. (Administration Bill)	House Interstate Committee
H. Res. 118	Select Committee on Aging: To establish non-legislative, information gathering committee.	House Rules Committee
S. 530	Universal Child Care and Child Development Act: To establish child service districts for full child care.	Senate Labor and Public Welfare Committee
S. 788	Drug Identification Act of 1971: To establish coding system to identify prescription drugs. (Administration Bill)	Senate Labor and Public Welfare Committee
S. 892	Qualifications of Certain Health Personnel: To determine proficiency to perform under Medicare and Medicaid.	Senate Labor and Public Welfare Committee
S. 1828	Act to Conquer Cancer: Special program to coordinate cancer research. (Administration Bill)	Senate Ordered Reported

PROPOSED NATIONAL HEALTH INSURANCE PROGRAMS

PLAN: AMA Health Care Insurance Act of 1971, H.R. 4960 (U. S. Representative Richard Fulton, D., Tennessee and U. S. Representative Joel Broyhill, R., Virginia); S. 987 (U. S. Senator Clifford Hansen, R., Wyoming).

PURPOSE: To provide for medical and hospital care through a system of voluntary health insurance including protection against the catastrophic expenses of illness, financed in whole for low-income groups through issuance of certificates, and in part for all other persons through allowance of tax credits.

HOW IMPLEMENTED: Taxpayer may purchase "qualified" insurance policy and be entitled to credit (based on his tax liability) on tax return for part of premium cost, or; if there is no tax liability, receives certificate good for full cost of premium, full tax credit allowed for all persons for catastrophic coverage premium.

METHOD OF FINANCING: Income tax credit ranging from 10% of premium cost to 100% on family tax liability; those with no tax liability receive certificate covering 100% premium cost.

GOVERNMENT PARTICIPATION: Federal financing through tax credits and "certificates"; state approval of insurance company and plan; an independent Health Insurance Advisory Board sets guidelines.

WHO IS INCLUDED: All persons under 65.

BENEFITS INCLUDED: Basic: All physician services plus 60 days in hospital and extended care facility, out-patient care. Catastrophic: unlimited hospital, 30 days extended care, blood after first three pints, prosthetic aids ordered by physician.

ANNUAL COST: Estimated 14.5 billion total, less savings of 2.4 billion from former XIX costs. Patient pays deductible.

PLAN: Health Security Act, S.3 (U. S. Senator Edward Kennedy, D., Massachusetts); H. R. 22 (U. S. Representative Martha Griffiths, D., Michigan).

PURPOSE: To create a national insurance program.

HOW IMPLEMENTED: Administered by Health Security Board. Agreements with provider to furnish health care. Hospital and nursing home budgets based on reasonable costs; physicians and dentists paid on fee schedule or per capita, or salary.

METHOD OF FINANCING: Wage tax of 3.5% on employer, 1% on employee and 2.5% on self-employed, 50% funding from general revenues.

GOVERNMENT PARTICIPATION: Program to be operated entirely by federal government includes control of financing, methods of payment, and standards for participation.

WHO IS INCLUDED: All persons.

BENEFITS INCLUDED: Broad medical benefits, no cost sharing, except some limits on psychiatric care; nursing home care for 120 days, dental care for children under 15 (ultimately to age 25).

ANNUAL COST: Sponsors estimate $41 billion if program in effect 1971. Social Security Administration estimates $77 billion.

PLAN: Extra Care Proposal, H.R. 177 (U. S. Representative Durwood Hall, R., Missouri).

PURPOSE: To assure to all Americans adequate protection against the costs of health care, through Federal-State programs covering all costs incurred by those who are unable to provide such protection for themselves and a Federal program covering catastrophic costs incurred by those who are normally able to provide such protection.

HOW IMPLEMENTED: State purchase of insurance medically needy. Voluntary purchase by others.

METHOD OF FINANCING: Part 1. For medically indigent: Federal government pays 85% of cost of basic health insurance policy, state pays 15% of basic and 100% of catastrophic. Part 2. For others: Federal government pays 90% of costs of catastrophic illness. Four percent wage tax paid into Federal Health Care Trust Fund.

GOVERNMENT PARTICIPATION: Federal: Financing of catastrophic coverage and participate in financing basic program for needy. State: Finance catastrophic for poor and participate in financing basic program for needy, determine medical indigency and average annual cost of adequate health care.

WHO IS INCLUDED: Part 1. All medically indigent: Basic and catastrophic coverage. Part 2. All others; catastrophic illness coverage.

BENEFITS INCLUDED: Part 1. Average and catastrophic insurance for poor. Part 2. Ninety percent of expenses after $5,000 ($1,000 is aged).

ANNUAL COST: Part 1. $3.5 billion. Part 2. Not stated.

PLAN: National Health Insurance Partnership Act of 1971 (Administration Proposals), S. 1623 (U. S. Senator Wallace Bennett, R., Utah); H.R. 7741 (U. S. Representative John Byrnes, R., Wisconsin).

PURPOSE: To require employers to make an approved basic health care plan available to their employees, to provide a family health insurance plan for low-income families not covered by an employer's basic health care plan.

HOW IMPLEMENTED: All employers to pay most of cost of health insurance for employees and family. Federal government pays cost of health insurance coverage for the poor.

METHOD OF FINANCING: Part 1. Employer pays 75% after 2½ years of premiums. Employee pays remainder. Part 2. Individual contribution based on income—remainder from general revenues.

GOVERNMENT PARTICIPATION: Part 1. Approval of employer-financed insurance plans. Part 2. Part federal financing, determination of eligibility.

WHO IS INCLUDED: Part 1. Virtually all employed persons and their families. Part 2. Families who are not eligible under Part 1 with incomes below certain levels established according to family's size.

BENEFITS INCLUDED: Basic health care coverage including in-patient hospital services, physician and emergency services (limits are not prescribed). Approval by the Secretary of HEW is necessary, $50,000 catastrophic coverage.

ANNUAL COST: Part 1. Estimated $7 billion employer-employee payments. Part 2. Estimated $5.4 billion total, estimated cost $12.4 billion.

PLAN: Minimum Health Benefits and Health Services Distribution and Education Act of 1971, S. 703 (U. S. Senator Claiborne Pell, D., Rhode Island).

PURPOSE: To provide minimum health benefits to employees and their immediate families and to provide for the distribution of health benefits, for medical education.

HOW IMPLEMENTED: Employers to provide minimum level of health benefits to employees and their families. "For-profit" community health and education corporation funded by sale of stock to offer services under prepayment plan to be established with government aid.

METHOD OF FINANCING: Employers pay full cost of employee coverage. Federal funds to aid development and operation of corporations.

GOVERNMENT PARTICIPATION: Participate financially in development and operations of corporations, but employers will pay the premiums.

WHO IS INCLUDED: Employees and their families. All persons eligible for care provided by the community and health corporations.

BENEFITS INCLUDED: Yearly: 12 days hospital care after first two days, 10 days nursing home care; physician care: emergency care, pre-natal care, chiropractic, drugs, and catastrophic costs above 25% of income.

ANNUAL COST: Not stated.

PLAN: HIAA, National Health Care Act of 1971, H.R. 4349 (U. S. Representative Omar Burleson, D., Texas).
PURPOSE: To provide a comprehensive program of health care for the 1970's by strengthening the organization and delivery of health care nation-wide and by making comprehensive health care insurance available to all Americans.

HOW IMPLEMENTED: Part 1. Voluntary health insurance: Individual or employer purchases insurance providing established minimum benefits and receives full tax deduction. Part 2. Qualified State Health Care Plan, with 70%-90% Federal participation for the poor and uninsurable.

METHOD OF FINANCING: Part 1. Full tax deduction for costs of qualified plan for individual and employer. Part 2. Sliding scale contribution by beneficiary according to ability to pay, state finance remainder of premium costs.

GOVERNMENT PARTICIPATION: Federal government establishes minimum standard health care benefits. State government operates qualified state health care plan.

WHO IS INCLUDED: Part 1. All employees and others above minimum income levels. Part 2. Needy and uninsurable individuals and families.

BENEFITS INCLUDED: Phased in program 1972 to January, 1979, to include virtually all ambulatory care, 300 hospital days, 180 skilled nursing home days, and 270 approved home health care days. Physician in and out of hospital.

ANNUAL COST: Not stated.

State Affairs

This being a year during which the Kentucky General Assembly did not convene, the Committee on Legislative Activities found it necessary to meet only on three occasions—October 27, 1970; March 15, 1971; and June 8, 1971.

The Committee members have attended several other meetings. The Chairman also has attended the KMA Congressional Dinner in Washington, the AMPAC Workshop in Washington, the Conference on Medical Education at Park Mammoth, Trustee District meetings and has made several trips to Frankfort where testimony on generic drugs was given before the Senate-House Health and Welfare Interim Committee.

At the Conference on Medical Education, legislative proposals of mutual interest, as well as administrative procedures, were discussed with representatives of the University of Louisville, the University of Kentucky and the State Board of Health. Both universities and the Board of Health expressed an interest and desire to have representation on the KMA Committee on Legislative Activities, and, as a result, the Legislative Committee recommended to the Board of Trustees that such representation be made possible. Consequently, the Committee has now been expanded to ten members with Peter P. Bosomworth, M.D., representing the University of Kentucky; Douglas M. Haynes, M.D. representing the University of Louisville; and Dexter Meyer, Jr., M.D., representing the State Board of Health. We are very pleased to have these members on the Committee, and this should enhance communications and cooperative efforts on the part of all concerned.

Some of the issues from the last session of the Legislature, which will undoubtedly be of concern again, include generic drugs, composition and responsibility of the State Board of Health and our perennial chiropractic bills. A subcommittee of the Committee on Legislative Activities has been appointed to review the Medical Practice Act and the Division of Medical Licensure of the State Board of Health. Staff and legal counsel have been instructed to review the problem of professional liability and to draft specific recommendations. An article was drafted on preliminary legislative goals and has been published in the *KMA Journal.*

The Committee on Legislative Activities continues to exert effort to maintain adequate communications with all specialty groups. Each specialty group has been asked to appoint or elect one member to serve as legislative liaison with the Committee on Legislative Activities. Each specialty group has also been requested to review and discuss any legislative proposal of special interest to them and report to the Legislative Committee. Efforts shall also continue to effectively communicate with all allied groups. We shall continue emphasis on positive legislative programs.

Efforts are constantly being made by our Committee and staff to strengthen and improve our Key Man System. This year our Committee will take the Key Man Orientation team into each Congressional District in an effort to reach more Key Men. The Committee wishes to emphasize the extreme importance of the Key May System and the absolute necessity for each Key Man to respond each time he is called upon, whether it be once every three months or three times a day. The Key Men must realize that without their help and cooperation the communicative system cannot adequately function, and

the profession of medicine, as well as the Commonwealth of Kentucky, will suffer if they fail to function. Each man should understand that he may be contacted several times on the same legislative matter as the situation may change in Frankfort. It is just as important for him to respond to the second or last call as it was for him to respond to the first.

The Committee on Legislative Activities recommends that the House of Delegates continue the following policy: (1) All legislative proposals be coordinated by and channeled through the Legislative Committee. (2) Two staff men continue to work full time exclusively on legislative matters during the time the Kentucky General Assembly is in session. (3) The composition, authority and function of the Quick Action Committee be retained. (4) The composition, priority, manner and time of introduction of legislative proposals be left to the discretion of the Committee on Legislative Activities. The above policies are not new, rather they are the ones under which we are currently operating. However, I feel they are extremely important and would be pleased to appear before any committee or group to further discuss them if desired.

It should be pointed out once again that while our staff men are in Frankfort for the Kentucky General Assembly they are responsible only to their immediate superiors and not to individual members of the Association. The staff men are all extremely hard-working, very cooperative and most dedicated. Any complaint relative to the legislative program or its administration should be directed to the Legislative Committee Chairmen and not to the staff men. The field men have been instructed not to carry out any recommendations or suggestions presented to them by anyone without first the approval of this Committee or its proper representatives.

Once again this Committee cannot emphasize frequently enough nor loudly enough the absolute necessity of physicians participating at the local level, not only in legislative affairs, but in primary and general elections as well. So often the members of our Committee hear from Legislators that the physicians in their local areas have not been in contact with them. We urge all physicians to become interested in legislative matters and to stay abreast of legislative trends and effectively communicate their opinions to their respective Legislators. We also strongly urge each physician to support the candidate of his choice, both financially and by actively campaigning in behalf of the candidate. It is extremely important for all physicians to maintain rapport with their Legislators, and even more importantly, for the Key Men so assigned.

I wish to express appreciation to my Committee members, the Quick Action Committee, the Board of Trustees, the House of Delegates and all our staff for excellent assistance, advice and truly outstanding cooperation. I sincerely wish time would permit me to continue in this capacity. It has been a sincere pleasure to serve as Chairman for State Affairs, and I am most grateful for the assistance and cooperation I have been given.

Fred C. Rainey, M.D.
Chairman for State Affairs

Recommendations, Reference Committee No. 3

The Report of the Committee on Legislative Activities was reviewed and discussed with interest.

National Affairs: The portion of the report concerning National Affairs was reviewed, and the Committee would like to commend this portion of the report for your reading, as well as for information concerning the status of selected medical legislation.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

State Affairs: The Committee reviewed the portion of the report dealing with State Affairs. This Committee again wishes to express our gratitude to the participants in the Key Man Program and others who gave so much of their time. We urge that continued efforts be made to strengthen the Key Man system, as well as the absolute necessity of physicians participating at the local level, not only in legislative affairs, but in primary and general elections as well.

The Reference Committee wishes to express appreciation to the Quick Action Committee for its usefulness.

The Reference Committee wishes to commend Doctors Hoyt D. Gardner and Fred C. Rainey for their untiring efforts on the Legislative Activities Committee.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Orientation

The Committee on Orientation held one meeting during the 1970-71 Associational year. The meeting was held on June 3, 1971, and the Orientation Program for the 1971 Annual Meeting was discussed at that time.

During the year, the Committee on Orientation surveyed everyone in the Association who had attended the Orientation Program during the past three years. This was undertaken following a recommendation of the Board of Trustees that some changes might be in order for the format of the Orientation Program. The responses to the questionnaire showed that nearly 70 per cent of the members included in the Orientation Program during those three years were in favor of continuing the program and felt it had real merit.

Following the House of Delegates' suggestion in 1969 that the program should be redesigned, the Committee had deleted from the program in 1970 parts which it felt were overlapping and could be dispensed with the new approach to Orientation. With this thought in mind, the Committee in 1971 once again reviewed the program and made several changes which they felt would make Orientation more meaningful to any new physician joining KMA. There has been a definite attempt to shorten the program and still include any important items which should be a part of this type program.

Under the new format, the Orientation Program is held only at the Annual Meeting, and a physician joining KMA has three years in which to attend one Orientation Program. In 1971, the subjects to be covered in the Orientation Program are as follows:

1. County Medical Society and Community Relations
2. American Medical Association Activities
3. Health Insurance (Blue Cross-Blue Shield)
4. Health Insurance (Commercial)
5. Peer Review
6. Medico-Legal Aspects
7. The Physician's Role in Legislation and Politics

The Orientation Committee will continue to revise the program as is necessary to stay up-to-date with the rapid changes taking place within organized medicine.

Wyatt Norvell, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Orientation was reviewed. The importance of the Orientation Program is recognized, as well as the continued need to revise and update this program as the Committee suggested.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Health Careers

This year, restricted funding at both the national and state levels has acted to halt the development of new health careers programs within the State.

Consequently, the activities of the Health Careers Committee were somewhat limited.

The Committee did review and recommend for Procedural Endorsement the following programs:

1. Family Nurse Practitioner
 (Frontier Nursing Service—Vanderbilt University School of Nursing)
2. Renal Dialysis Technologist
 (University of Kentucky Medical Center)

Health Careers in Kentucky has continued to act as the principal coordinating unit for recruitment of students for health careers within the Commonwealth. Members of the Kentucky Medical Association's Health Careers Committee served with the Advisory Council of Health Careers in Kentucky and have participated actively in its functions.

The Committee also developed an exhibit to be used by the Kentucky Medical Association for recruitment at appropriate meetings and conferences.

Joseph Hamburg, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Health Careers was reviewed. We wish to thank the members of this Committee for their important and valued services.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Cults Committee

The Committee on Cults did not meet in formal session during the 1970-71 Associational year. There were two meetings scheduled but due to the fact that there were several conflicting meetings, it was impossible to get a sufficient number of Committee members present for either of these two scheduled meetings.

During the past Associational year, there have been a considerable number of contacts made with various county medical societies concerning the problem involved with cults. At the present time, in conjunction with the Committee on Public Relations of KMA, the Committee on Cults is attempting to formulate a program of contact with other professional groups who might be willing to support KMA legislative proposals during the 1972 legislative session. It has been determined that it would be much better if additional support from groups outside the Kentucky Medical Association were allied with KMA prior to the introduction of legislation which might have the effect of restricting cult activities in Kentucky.

It is hoped that during the next Associational year, many additional contacts can be made at the local level to more clearly define the problems which are facing medicine today as far as cults are concerned.

David B. Stevens, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Cults has been reviewed. The Reference Committee wishes to acknowledge the work that this Committee does and feels that this type of work should be continued.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the KMA Interspecialty Council

The KMA Interspecialty Council, formed on recommendation of the Plans and Development Committee, was organized to explore the possibilities and advantages of joint action by such a group.

Initial considerations had to do with the type and extent of facilities and service which might be desired by these groups and which could be furnished by a central office and with methods of financing.

Pressing need of some declaration from the group included possible provision for space in the projected expansion of the KMA Headquarters Building.

Long-range plans for the group involved coordination of legislative matters and problems of effective general continuing medical education programs and other projects of common concern to Kentucky physicians and their patients.

At the April 29, 1971 meeting, nine of eighteen invited groups expressed their viewpoints. Some, not having had a recent meeting with their own groups,

were unable to express specific desires other than general approval of the formation of such a Council, whereas others expressed specific interest in space and secretarial services.

Groups were requested to gain information and to return to a meeting scheduled tentatively for July 15, 1971. Too few representatives were able to attend this meeting for an effective expression.

In the meantime, the Building Committee and the Board of Trustees have been requested to include space for at least two rooms for the use of this group, this being the present estimate of space needed. It has been suggested that as far as secretarial and equipment costs are concerned, that KMA might assume the financial underwriting for the first year and charge the users of these services hourly and space fees based on cost.

Another meeting is planned for early fall. This report should be considered a progress report and not a final summation of activity in view of the many groups involved and that the membership of this Council concerns individuals and groups whose calendar year of activity does not coincide with that of KMA. Further meetings will develop the desires of the group as to immediate and long-range plans.

Richard F. Grise, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Interspecialty Council was reviewed. We noted that this report should be considered as a progress report only, as there are several unresolved problems.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Ad Hoc Committee on Cults Report

The Ad Hoc Committee on Cults held one meeting during the Associational year. The Chairman made several trips to speak to various county and/or district medical society meetings. At these meetings, information was provided, pamphlets were distributed to those in attendance and questions were answered.

A review of KMA Legislative Activities regarding chiropractic was given to interested groups within KMA and activities of the Ad Hoc Committee are being coordinated with the Committee on Legislative Activities. There will probably be legislation introduced in the 1972 Kentucky General Assembly dealing with educational requirements of any practitioner of a healing art.

Recommendations, Reference Committee No. 3

The Report of the Chairman, Board of Trustees, Ad Hoc Committee on Cults Report only, was reviewed. The Reference Committee feels that this is additional information concerning activities of the Committee on Cults.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution C

Fayette County Medical Society

WHEREAS, the Kentucky Revised Statutes provide that an unrealistic maximum compensation of ten dollars ($10.00) be paid to physicians for their services in competency hearings before Kentucky Circuit Court Judges, and

WHEREAS, Circuit Court Judges cannot easily obtain such services for this small compensation, be it therefore

RESOLVED, that the Fayette County Medical Society seek through the Kentucky Medical Association House of Delegates and the Kentucky Medical Association Legislative Committee change in the Kentucky Revised Statutes that would permit the Circuit Judge to pay a reasonable fee to physicians for their professional services in competency hearings.

Recommendations, Reference Committee No. 3

Resolution C—Professional Services in Competency Hearings, introduced by the Fayette County Medical Society, was reviewed with interest. The Reference Committee moved that a change of wording be recommended, and we move to amend this resolution by adding in the next to the last sentence ". . . Judge to pay an adequate and reasonable fee to physicians for their professional . . ."

Mr. Speaker, I move the adoption of Resolution C as amended.

(Motion was seconded.)

Considerable discussion ensued concerning Resolution C, following which a motion was made and seconded to table Resolution C for further study and clarification. This motion was adopted by a 68 to 60 margin.

Resolution L

Jefferson County Medical Society

WHEREAS, physicians, because of their professional knowledge, interest in health care, and dedication to the public's health interest, should always be members of City County Health Department Boards, and

WHEREAS, the Kentucky Revised Statutes 212.640 states that in counties containing second class cities, the City County Board of Health will be composed of six members, one of whom should be the mayor or city manager, whoever is appointed by the city legislative body, one of whom shall be the county judge, one of whom shall be a dentist, and three of whom shall be physicians appointed in like manner as described in KRS 212.020, and

WHEREAS, although physician members on the City County Health Department Board are required for second class cities, in KRS 212.380 for first class cities, we note it states that physicians are not required, "Said board shall be composed of seven members, two of whom shall be the mayor of such city, and the county judge of such county, as members ex officio, and five of whom shall be appointed by the joint action of the mayor of such city and the county judge of such county. Each appointive member shall be not less than 30 years of age, intelligent, discreet, and shall have been a continuous resident of such county for at least two years prior to the date of his or her appointment. No more than three of said appointive members may be physicians."

THEREFORE BE IT RESOLVED, that the House of Delegates of KMA instruct its Legislative Committee and officers to work during the next session of the Kentucky General Assembly in order that KRS 212.380 might be amended to mean, in part, that at least one physician and not more than three *are required* to serve on the City County Board of Health in counties containing first class cities.

Recommendations, Reference Committee No. 3

Resolution L—Physicians on City County Health Department Boards, introduced by the Jefferson County Medical Society, was reviewed by the Committee. The Committee approved of its contents.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and, following discussion, was adopted.)

Resolution Q

Floyd County Medical Society

WHEREAS, the physicians of Kentucky are the only professional group which do not govern and discipline the licensing of its members, be it further

RESOLVED, that the KMA should recommend to the Kentucky State Legislature to transfer the Kentucky Medical Licensure Board from the State Board of Health back to the Kentucky Medical Association.

Recommendations, Reference Committee No. 3

Resolution Q—Kentucky State Medical License, introduced by the Floyd County Medical Society, was reviewed by the Committee. It is the opinion of the Reference Committee that this resolution is in agreement with the desires of our Committee.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

At this time, Doctor Hess, Chairman of the Board of Trustees, was recognized to submit a substitute, drawn up by the Board, for Resolution Q as follows:

"WHEREAS, the physicians of Kentucky are the only professional group which do not govern and discipline the licensing of its members, be it

"RESOLVED, that the KMA should recommend to the Kentucky State Legislature that it create a separate Kentucky Medical Licensure Board to be appointed from nominations by the Kentucky Medical Association, such Board to be empowered to locate its offices at the KMA Headquarters Office."

A motion was made, seconded, and passed to adopt the substitute resolution as submitted by the Board of Trustees.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole as amended with the exception of Resolution C which was tabled.

(Motion was seconded and carried.)

Mr. Speaker, as Chairman, I wish to thank the members of this Committee for their help in preparing this report and also a note of thanks to our secretary, Miss Patricia Borders.

REFERENCE COMMITTEE NO. 3

Robert L. McClendon, M.D., Louisville, Chairman
Carl J. Brueggemann, M.D., Covington
John S. Oldham, M.D., Owensboro
Charles B. Stacy, M.D., Pineville
Raymond D. Wells, M.D., Inez

At this time, Doctor Greathouse introduced C. Kenneth Peters, M.D., Chairman of the KEMPAC Board of Directors, who presented his annual report concerning KEMPAC activities to the members of the House. Doctor Peters emphasized that it is time for Kentucky physicians to join forces, study, the issues, and know what national health insurance plans are all about before the 1972 election. He encouraged the members of the House who are not members of KEMPAC to join the organization. He expressed the gratitude of KEMPAC for the support of the Kentucky Medical Association for their contribution to the KEMPAC Educational Fund, and explained that the Fund account is used for educational and administrative purposes while all dues money is used to support candidates. Doctor Peters closed his remarks by thanking the House for action taken in the past and requesting its continued encouragement and endorsement.

REFERENCE COMMITTEE NO. 4

W. Neville Caudill, M.D., Louisville, Chairman

Reference Committee No. 4 considered the following reports:

13. Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

21. Report of the Advisory Committee to Blue Shield

Next to last paragraph on page 31 and paragraphs 1 and 2 on page 32 referred to Reference Committee No. 6

Paragraphs 3 through 5 on page 32 referred to Reference Committee No. 5

22. Report of the Advisory Committee to Blue Cross

34. Report of the Committee on Community and Rural Health

35. Report of the Committee on Environmental Quality

37. Report of the Senior Day Committee

38. Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports

40. Report of the Committee on Public Relations

5. Report of the Chairman, Board of Trustees, Ad Hoc Committee on Electronic Data Processing Report only

Resolution H—Third Party Payment Plans (Nelson County Medical Society)

Resolution N—Current Procedural Terminology—(Fayette County Medical Physicians)

Resolution O—Accuracy in News Reporting and Editorials (Warren County)

Report of the Board of Directors Kentucky Physicians Mutual

The past twelve months have been very challenging to not only health care providers but Blue Shield as well. Never before has there been as much criticism, public concern, press coverage and general questioning of the health care system, especially the cost and its constant increase, also of voluntary prepayment organizations. In the face of so much adversity, it is a pleasure for me, as Chairman of the Board of Kentucky Physicians Mutual, to present a report of some positive accomplishments.

Kentucky Blue Shield's membership is now in excess of 1,115,570, a net gain of 4.5% in the last twelve months. There are over 545,520 members with protection to help pay for long-term catastrophic illness, in addition to basic protection. In the same period, over 1200 additional companies voluntarily enrolled their employees and dependents in Blue Shield, making a total of 12,730 member companies. Over 61,450 people 65 years of age and over are protected by the "over 65 program" to help fill the voids in Medicare. In the last twelve months, we have paid in excess of $18,642,000 for services to members, an increase of $2¼ million over our last report. Total payment to doctors for services rendered our members since the organization of Blue Shield is now over $138,000,000.

Our Kentucky Blue Shield Plan is sound financially and has reserves of $11.64 per member. We continue to operate with one of the lowest overhead costs per member of the 74 Blue Shield Plans in America.

The administration of our Usual, Customary and Reasonable Program is working effectively with some 150,000 members covered. Currently, 79% of Kentucky physicians have signed a Participating Agreement for the program and the percentage continues to gradually rise each month. It is important to note that 59 counties have 100% representation; 67 counties are represented by more than 90% participation; and 89 counties have 75% or more physicians participating. Only eight counties with ten or more physicians have less than 70% participation, and these counties are located primarily in three basic areas in the State. During the period from January 1, 1970, through December 31, 1970, 105,438 Usual and Customary claims have been processed, representing a total payment of $5,677,118 for members' services under the program. In the first six months of 1971, 67,930 Usual and Customary claims were processed for a total payment of $4,167,903 for members' services.

The Board of Directors and staff are highly complimentary of the work and dedication of local review committees and the Kentucky Medical Association Claims and Utilization Review Committee. In 1970, only 154 cases were referred to a committee and this case figure represented .146% or less than 2 tenths of 1%, of the total claims submitted. In the first six months of 1971, 124 cases were referred to a review committee, representing .182%, still less than 2 tenths of 1%.

The Usual, Customary and Reasonable Program is working and helping Kentuckians voluntarily prepay the cost of necessary professional care.

The past eighteen months have also seen growth in the Blue Shield Prescription Drug Program. Initially, the program was offered to pharmacies only in the Jefferson County area and 87% signed Participating Agreements. In 1970, the program was offered statewide in anticipation of other accounts wanting to voluntarily prepay the cost of covered prescription medicine. During 1970 and the first six months of 1971, there were 143,930 Drug Program claims processed representing a total payment of $469,270 for members under the program.

Recognizing that there can be duplication of services that increase the cost of helping Kentuckians finance the cost of health care, and also recognizing the need and demands for comprehensive dental benefits, Kentucky Physicians Mutual, Inc., in cooperation with Kentucky Blue Cross and the Delta Dental Plan, have been working toward the preparation and development of a prepaid dental program. It is anticipated arrangements will be completed for the program by this fall. It will be geared to preventive dentistry, and we are very excited about the prospects of being able to offer these needed additional comprehensive benefits to Kentuckians.

In March of this year, the Board of Kentucky Physicians Mutual, Inc., in cooperation with Kentucky Blue Cross, established a position endorsing "experimentation" in various methods of delivery and financing health care, when desired by consumers and medical groups working together.

The Consumer Advisory Committee to Blue Cross and Blue Shield continues to express concern over health care cost, the constant increase and delivery of care. The Committee is concerned with providing a voluntary financing mechanism for necessary services provided on a basis other than traditional acute care, such as home health care and nursing home care. An endorsement to Blue Cross and Blue Shield certificates is now being offered to eligible group members to pay for services provided members in approved convalescent care facilities. We are hopeful that a high percentage of our members are willing to pay

the additional dues necessary to provide such protection.

The corporate policy on health care delivery experiments of Kentucky Blue Cross and Blue Shield, working with consumer groups, the Kentucky Medical Association, county medical societies, Kentucky Hospital Association and hospitals, will be to lend expertise and counseling, including marketing, professional relations and administrative know-how and services. The overall objective will be to help guide them to a self-supporting basis so as not to increase the cost of care by duplication of services. The Boards recognized that there are legitimate, legal, sincere efforts on the part of consumers, doctors and hospitals to experiment in various methods of delivery of care to try to bring more and better care to people at lowest possible cost.

Companies and unions are now bargaining tougher over health care benefits than ever before. Employees are meeting increasing resistance from employers concerning payment for health programs. Business organizations such as the U. S. Chamber of Commerce as well as insurance commissioners, congressional and legislative committees, labor and consumer organizations are now taking critical looks at the total health care picture. New patterns of benefits are now being demanded including payment of percentages of coverage by companies and employees as exemplified by the recent national settlement by the Bell Telephone System and the Communication Workers of America with the company agreeing to pay 80% of usual, customary and reasonable charges and the employees paying 20%.

The Kentucky Medical Association started Blue Shield in Kentucky for the people, to help solve a socio-economic problem, to help people voluntarily budget for health care and to be in a better position to meet their financial responsibility to their doctors. There were other objectives, also; to try to help prevent the socialization of medicine and further government encroachment, to strengthen the voluntary free enterprise system. This is a never-ending fight and today we are still very much in the forefront. The furor over Medicare, Medicaid, the cost of care, the accessibility of care, has increased the momentum in Congress to establish a compulsory federal health program. We think strong, successful, voluntary prepayment organizations such as Kentucky Blue Shield are one of the first lines of defense against complete compulsory government health schemes.

We need the understanding and support of the doctors of Kentucky as well as that of business, industry, labor and the general public in our efforts. These are very crucial times. It is vital that Blue Shield work to the satisfaction of members and the public at large as well as to the doctors of Kentucky.

Our voluntary system for prepayment is strong; it is vital; it is growing. We have many dedicated people in and out of medicine who give of their time to make it work. We are extremely grateful to all of them. We know our objectives and what we are doing are in the best interests of the people, the medical profession and our voluntary system. We wish to extend to the members of the entire medical profession of Kentucky and to the staff of the Kentucky Medical Association our sincere thanks for their cooperation and contribution in helping make this another successful year.

Wyatt Norvell, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Board of Directors, Kentucky Physicians Mutual, Inc., was reviewed and approved by the Committee.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee to Blue Shield

Your Advisory Committee to Blue Shield held a most productive and informative meeting on May 26, 1971. New ideas were presented, current information distributed and timely programs reviewed.

Following a review of the 1970 Report of the House of Delegates, the President of Kentucky Physicians Mutual, Mr. J. Ed McConnell, and members of his staff submitted several informative reports. A summary of these reports indicate the activity and progressive leadership provided Blue Shield in Kentucky:

1. Enrollment: The total membership in Blue Shield as of April 30, 1971, was 1,103,121 members, of which 248,692 have Extended Benefits coverage; and 282,498 have Major Medical coverage.
2. Professional Relations: During 1970, the Professional Relations staff contacted over 4,600 physician offices, personally visiting with the physicians on over 2,200 of these calls. The staff met with over 83 Medical Staffs and Societies and Utilization Review Committees. Seventeen Blue Shield Seminars were held, attended by some 1,300 physicians' medical assistants.
3. UCR Program: For the 1970 calendar year, there were 105,438 claims processed under the Usual, Customary and Reasonable concept, totaling some five and one-half million dollars. It was necessary to refer 154 cases to review committees which represented .2 of one per cent of the volume processed. Currently there are 22 County Review Committees, in addition to the Statewide Committee. The 154 cases were referred to only 12 of these committees, with 34 cases being reviewed by the State Committee. In addition to the county review committees, there are now 15 regional committees that should be operational by the time this report reaches you in September.

 Physician participation continues to increase, and approximately 80 per cent of the practicing physician population in the State have signed participating agreements.

4. Pre-Admission Testing: An informational report was given regarding the Pre-Admission Testing Program recently instituted by Blue Cross. The program is designed to shorten the patient's in-hospital days by having results of tests available upon admission. More information about the Pre-Admission Testing Program can be found in the Report of the Advisory Committee to Blue Cross.
5. New Benefits: The Blue Shield Staff reported that several new benefit programs are now under development. Included is a Dental Program, a Home Health Care Program and the Convalescent Care Program. The Convalescent Care Program, effective July 1, 1971, will provide benefits for admissions requiring skilled services rendered in an approved member Convalescent Care Facility. This new benefit will be offered to eligible group members as an Endorsement to Schedule C or D Blue Shield and a Rider to Comprehensive Blue Cross.

In discussing the Report to the House of Delegates in September, 1970, there were two paragraphs very pertinent to this subject. Those two paragraphs which now represent KMA Policy as as follows:

"Your Committee feels that it is imperative that those in the free enterprise sysem use their initiative in developing programs through which private practice can be maintained and government medicine kept to a minimum.

We recognize that forces are in existence to cause experimentation with various methods of delivery of health services. We believe that if such experimentation is conducted, approved by the appropriate county medical society and the Kentucky Medical Association, that the Kentucky Blue Shield Plan be requested to work in cooperation with KMA in developing an appropriate prepayment mechanism for such experimentation."

Following the discussion on Utilization Review and a data gathering system, the Committee felt it imperative that physicians should have more informaion as to the charges by hospitals for various services ordered by physicians and unanimously recommend that KMA, working with the Kentucky Hospital Association, request each hospital in Kentucky to provide a list of charges to the members of the medical staff. Knowledge of these charges could affect a physician's decision when ordering them.

Your Committee believes its role is to feel the pulse of the profession and transmit its reactions, by recommendation through the KMA Board of Trustees, to Blue Shield. This we strive to do in the best interest of KMA and the citizens of this Commonwealth. We urge the continuance of upgrading Blue Shield coverage and feel that good strides are being made in this regard.

I wish to personally express a feeling of deep appreciation to all my Committee members for their time and unselfish contributions.

Kenneth P. Crawford, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to Blue Shield was reviewed with the exception of paragraphs relating to the HMO concept and utilization review. Those portions reviewed were approved.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee to Blue Cross

The purpose and broad duties of your Kentucky Medical Association Advisory Committee to Blue Cross as defined and outlined by the Board of Trustees is to:

"Monitor the Utilization of the Blue Cross Plan through its objective of striving to furnish for the public and the medical profession as advantageous a coverage as possible for the dues paid, avoiding abuses of Blue Cross to include studying and correcting the trends before they develop into abuses, and continuing the efforts of keeping the physicians of the State informed and interested in the operation of Blue Cross."

At a general meeting of the Committee on November 18, 1970, the agenda included discussions of Blue Cross benefits, exclusions, Pre-Admission Testing Program, Coordination of Benefits, Extended Care Facility covered care guidelines and other topics.

One item of particular interest and one which the Committee devoted considerable time discussing was the exclusion of admissions primarily for diagnostic studies.

The Committee requested Blue Cross to prepare some descriptive information regarding the exclusion. The descriptive material was mailed to all physicians with a cover letter from the Committee Chairman on March 4, 1971. This mailing was done with the hope that it will help in alleviating some of the misunderstandings that have arisen concerning the exclusion of admissions primarily for diagnostic studies.

The Committee discussed the value of the booklet, "A Guide to Blue Cross Limitations and Exclusions," which was developed by the Advisory Committee of 1966 and recommended that it be revised and updated. The Guide is currently being updated and is scheduled for distribution in early fall of 1971.

The Blue Cross staff outlined a program for Pre-Admission Testing. The program provides coverage to Blue Cross members for outpatient tests done at the hospital prior to a scheduled admission and is designed to shorten the inpatient stay by having results of tests available at the time of admission. The Advisory Committee recommended that all hospital administrators and chiefs of medical staffs be advised of this program and that an effort be made to secure participation between Blue Cross and member hospitals. To date, 21 hospitals are participating in the program and we urge physicians to become aware of its advantages.

Since the Advisory Committee also functions as a review mechanism to which Blue Cross cases can be referred for consideration of necessity of admission and length of stay, it was determined that to speed up the review process, subcommittees would meet on a bi-monthly basis. During the past year, the Review Committee met four times, reviewed 35 cases, disallowed a total of 413 hospital days.

The many activities of the Committee this year necessitated several meetings and I am grateful to the members and particularly to John Sonne, M.D., who served as Vice-Chairman, for giving so freely of their time and effort.

Esten S. Kimbel, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to Blue Cross was reviewed and approved.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Community and Rural Health

The Community and Rural Health Committee held its single meeting this year on February 11, 1971. The Committee's duties are varied and include the various aspects of public and rural health, mental helath, TB and TB Control, highway safety and drug abuse.

The Committee again sponsored Community Health Week in Kentucky during the first week of May. The focus of this year's promotion was on immunization; and a schedule, patterned after the *Redbook,* published yearly by the American Academy of Pediatrics, was to be sent to each doctor in the state as part of the immunization program. We wish to express our appreciation for the cooperation of the membership in this program.

In addition, we received assistance from several allied organizations, for which we are grateful. Plans are for future recognitions of Community Health Week to emphasize local medical progress, available health services and facilities, and the individual and cooperative roles played by members of the community health team.

In the area of rural health, the Committee continues its interest in Home Health Care Programs and urges the membership of KMA to become more familiar with them. The Committee noted that one barrier confronting these programs concerned malpractice coverage and responsibility for allied health professionals who perform the actual patient care under a physician's supervision. We were pleased to learn that the KMA Legislative Committee has taken this matter under study.

Your Chairman had the pleasure of representing KMA at the AMA National Conference on Rural Health in Atlanta this past March. Many new concepts in the delivery of health care in rural settings were discussed, including utilization of physician's assistants and government-sponsored health programs.

Highway safety is of major interest to the Committee. One action resulting from our discussions this year was a letter voicing KMA's opposition to the removal of seat belts as a standard automotive safety feature until the perfection of passive restraint mechanisms. We continue to publicize the KMA Automotive Safety Award and the KMA General Safety Award and we encourage the membership of KMA to advise us of groups which might qualify for them.

A new added duty of the Committee is to study the various aspects of drug abuse. It is our feeling that physicians should become more active in this area and a subcommittee on drug abuse was appointed, chaired by N. I. Handelman, M.D. As a result of the subcommittee's efforts, it was taken by consent to introduce the following resulution on drug abuse and urge its adoption:

WHEREAS, the abuse and misuse of amphetamines has become a problem of increasing national concern to the medical profession, and

WHEREAS, these drugs have been and are being produced in great excess of actual need, and

WHEREAS, legislation has been introduced on the national level to create better control over the manufacture and distribution of amphetamines, and

WHEREAS, the Food and Drug Administration is being called upon to tighten the regulations regarding the manufacture and use of amphetamines, and

WHEREAS, the Kentucky Medical Association, through appropriate committee activity, has become vitally concerned about the continuing increase in misuse and abuse of amphetamines, THEREFORE BE IT

RESOLVED, that each county medical society throughout Kentucky establish, if one is not already active, a Drug Abuse Committee in an effort to create community awareness of the hazards associated with abuse of amphetamines and other dangerous drugs, and BE IT FURTHER

RESOLVED, that in the areas where drug abuse committees are already functioning, physicians take an active role in providing information to the general public so that they will become even more aware of the problems, and BE IT FURTHER

RESOLVED, that the Kentucky Medical Association urge all physicians to limit their use of amphetamines and other stimulant drugs to specific, well-recognized medical indications, and BE IT FURTHER

RESOLVED, that the Kentucky Medical Association join with the American Medical Association to support the proposal of the Bureau of Narcotics and Dangerous Drugs to transfer amphetamines and methamphetamines and their Salts, Optical Isomers, and Salts of their Optical Isomers from Schedule III to Schedule II, published in the May 26, 1971 Federal Register, and BE IT FURTHER

RESOLVED, that every method available be used by the Kentucky Medical Association to make every citizen of the Commonwealth aware of the abuse,

misuse, and over-production of amphetamines, and BE IT FURTHER

RESOLVED, that the Kentucky Medical Association do everything within its power to lead the fight against drug abuse in Kentucky, not only in the case of abuse of amphetamines, but in the over-use, misuse or abuse of any dangerous drug.

Because of the many demands being placed on the physicians' time, from many areas, I would like to commend the exemplary participation of the members of this Committee. I am indebted to these men for their participation and leadership.

John M. Baird, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Community and Rural Health was reviewed, discussed, and approved. The Reference Committee would further recommend, however, that the Committee on Community and Rural Health concern itself with the problem of alcohol and highway safety. Since it was our Committee's feeling that, although less in vogue than drug abuse, the drinking driver presents a much more serious threat to life and health in Kentucky.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Environmental Quality

The Committee on Environmental Quality met twice during the Associational year. There were two other meetings scheduled; but due to a number of conflicts with other meetings involving Committee members, they had to be cancelled.

This was the second year for this Committee to function as an active KMA Committee. Under the leadership of Frank B. Radmacher, Jr., M.D., the Committee had begun to take a vital interest in programs affecting Kentucky's environment and had begun to become engaged in coordinating Committee efforts with other groups who are concerned with Environmental Quality. Early in the Associational year, Doctor Radmacher was ill and asked to be relieved of his responsibilities as Committee Chairman. Due to this fact, we did not pursue as many projects as we had hoped to during the 1970-71 Associational year.

The Committee is hopeful that we will be able to set forth a full year of activities during 1971-72 since 1972 will be a legislative year in Kentucky.

There will undoubtedly be a considerable amount of legislation involving Kentucky's environment and methods of improving the quality of that environment. We are hopeful that the KMA Committee on Environmental Quality will be able to assume a meaningful role in representing the Association in all matters that fall under the jurisdiction of this Committee.

John E. Trevey, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Environmental Quality was reviewed. The problem presented to this Committee by the untimely illness of its Chairman is recognized. The Reference Committee suggests that this Committee undertake to collect and disseminate to the members of KMA existing environmental standards and statutes.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Senior Day Committee

KMA has sponsored a program for medical school seniors at the University of Louisville for the past 18 years and at the University of Kentucky since its first class graduated in 1964. These sessions were held with the cooperation and support of the Fayette and Jefferson County Medical Societies.

Various program formats have been utilized over the years in an effort to arouse the interest of the seniors and to introduce them to the intricacies of practice and organized medicine. In the past few years, a considerable amount of discussion has taken place as to what exactly should constitute a Senior Day Program, who should participate in it and how it should be conducted, if it is to be conducted at all.

This year both county medical societies planned and conducted Senior Day Programs without KMA sponsorship and the results were highly satisfactory. It is the feeling of the KMA Senior Day Committee that, since both the Jefferson and Fayette County Medical Societies now maintain executive staffs, it might be in the interest for each to continue to present a Senior Day Program in a fashion they feel is best for their particular situation. Certainly KMA should stand ready to render assistance to the counties when called upon.

The Kentucky Medical Association, although relinquishing this program to the counties, can increase its liaison with the medical student through the KMA organizational structure by continuing to have them serve on committees and hold membership in the House of Delegates.

The Committee feels this is the most expedient course of action and; therefore, recommends discontinuance of the Senior Day Committee and activities at the state level until such time as may be indicated.

Hoyt D. Gardner, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Senior Day Committee was reviewed and approved, and the Reference Committee agrees that it is more expedient to have the Senior Day activities arranged separately by the Jefferson and Fayette County Societies for their respective medical schools; but, we would suggest that the KMA continue to financially support this program as it has in the past.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

The single meeting of your School Health, Physical Education and Medical Aspects of Sports Committee was held this year on April 1, 1971.

In the past Associational year, emphasis was again on strengthening the liaison between high school coaches and physicians. Several members of the Committee conducted pre-season medical aspects of sports seminars in conjunction with the high school football rules conferences given throughout the State prior to the start of the football season. We are pleased with the response given these seminars in the past and encourage their future continuation on an annual basis.

The Committee hopes to present next year a program on the medical aspects of sports on educational television. The Committee feels the television media is an excellent means of presenting programs directed not only to coaches, but to teachers and parents as well, on this important topic.

This year's activities also included participation in the Kentucky Forum for Education to help explore and persent programs relating to education. The Committee worked with the Department of Mental Health in designing a recreational program that hopefully will be helpful in curbing the juvenile delinquency problem. In addition, your Chairman represented KMA at the 12th National Conference on Medical Aspects of Sports held in Boston.

Once again, as in the past, we had the privilege of presenting an exhibit at the Annual Meeting of the Kentucky Educational Association in Louisville. This year's exhibit was entitled "Students Look at Drug Abuse" and was well accepted by the teachers, since it is a main topic of concern in schools today. Members of the Committee answered questions and distributed pamphlets describing the different types of drugs and drug abuse at the exhibit.

At this time, as Chairman, I would like to thank the dedicated members of this Committee who have worked so diligently this year.

O. B. Murphy, M. D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports was reviewed and approved.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Public Relations

The Committee on Public Relations got off to a relatively slow start this year due to a number of extenuating circumstances. The first meetings of the Committee were set up primarily to establish some goals for the Committee which, it was felt, would be reasonable and possible to achieve as the Committee becomes more familiar with its role in the overall structure of KMA.

With the addition of a Consultant on the Public Relations Committee, it is felt that the Committee can be very helpful to other groups within KMA in providing proper publicity for these groups so that the programs and plans of KMA can be made better known to the public and to the Profession.

A request was made by the Chairman to members of the Committee and to our Consultant, Mr. Ted Tighe, that they provide their ideas, thoughts and suggestions to the Chairman so that more specific goals can be established for the 1971-72 Associational year.

As a result of these discussions, your Public Relations Committee recommends to the Board of Trustees of KMA that our principle activity during the Associational year 1971-72 be in the area of peer review. It is felt that a program of education, working in conjunction with the other interested groups within KMA, would be very meaningful in making the physicians of the State aware of the importance of peer review activities.

The Chairman wishes to express his appreciation to the members of the Committee who have given their time and effort during the initial year of this Committee's activities.

Robert C. Long, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Public Relations was reviewed. It was the feeling of the Reference Committee that the peer review activities are being adequately publicized by the very effective Claims and Utilization Review Committee, and that the Committee on Public Relations perhaps needs to concern itself more with response of unfair and unjust criticism of doctors as was recently the case concerning the physicians of Warren County.

The Reference Committee recommends that the report be amended as follows:

> The deletion of Paragraph four: "As a result of these discussions, your Public Relations Committee recommends to the Board of Trustees of KMA that our principle activity during the Associational year 1971-72 be in the area of peer review. It is felt that a program of education, working in conjunction with the other interested groups within KMA, would be very meaningful in making the physicians of the State aware of the importance of peer review activities."

and substitute for this paragraph the following:

> "The principle activity of this Committee for the 1971-72 Associational year shall be in the area of

external public relations. The Public Relations Committee shall be sensitive to adverse publicity whereever it arises among the component societies of KMA. It shall take action to insure accurate portrayal by the various news media of the physicians and his relationship with the community."

Mr. Speaker, I move the adoption of this section of the report as amended.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Ad Hoc Committee on Electronic Data Processing Report

The Ad Hoc Committee on Electronic Data Processing was appointed by the Board of Trustees prior to last year's KMA Annual Meeting. The Committee was established for the purpose of studying the feasibility of KMA utilizing computers to bill all KMA members directly from the Headquarters Office.

At the first meeting, the Committee studied a proposal presented by the President of the Data Aide Associates of Chicago. After careful consideration, the Committee decided to investigate other computer services to include the possibility of a local organization being employed to set up a computer program.

On June 10, the Committee met for the second time with representatives of Blue Shield and the Jefferson County Medical Society Business Bureau.

The Committee is continuing to make an in-depth study of a computer program for KMA to include the cost and the amount of time needed to set up such a program. A full report is expected to be presented at an early date.

Addendum to the Final Report of the Ad Hoc Committee on Electronic Data Processing

After the Committee had submitted its final report to the Board of Trustees, the Committee members have had an opportunity to review some specific proposals relating to direct billing and general use of computers which we feel are most attractive and beneficial to the Association. It is the Committee's opinion, the proposed computer-use recommendations we reviewed not only expand the capabilities of our administrative operations by the information to be provided, but in the future, would prove to be a cost-saving mechanism.

Therefore, this Committee recommends that the House of Delegates go on record approving as policy the direct billing of dues to all KMA members from KMA's Headquarters Office by computer when it is deemed advisable by the Board of Trustees.

In explanation, we would point out that no county society would collect its own dues in the future, but all dues would be sent to KMA with reimbursement to the county society of their own dues.

This policy by the House of Delegates will eliminate any survey that would have to be taken of all county societies. This policy would also eliminate any confusion that may arise from counties who might want to continue using the old method. Everyone would utilize the same mechanism which would be a time-saving device for county society secretaries.

We would further point out, this procedure would not be put into effect until the Board of Trustees agrees that it could be done effectively and correctly without undue confusion. It is anticipated that such a program could go into effect by January 1, 1973, or January 1, 1974.

Recommendations, Reference Committee No. 4

The Report of the Chairman, Board of Trustees, Ad Hoc Committee on Electronic Data Processing Report was reviewed and approved.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Resolution H

Nelson County Medical Society

WHEREAS, there now exists a different payment plan for doctors by third party carriers based upon economic and geographical location, and

WHEREAS, payment should be based upon service and ability and not upon geographical and economic location, and

WHEREAS, the cost of living and carrying on the practice of medicine is not materially different throughout the state, and

WHEREAS, the difference in payments prejudices doctors from going into the areas where they are needed because of lower remuneration, and

WHEREAS, even if a doctor charges less in a given area through custom he ought to have *a right to charge* the same as his peers throughout the state, therefore be it

RESOLVED, that the Kentucky Medical Association, not only urge all third party carriers, but use every means at its disposal to bring about an equitable payment plan for all doctors in the state, be it further

RESOLVED, that such a plan be based on service and not on geographical or economic location.

Recommendations, Reference Committee No. 4

Resolution H—Third Party Payment Plans, introduced by the Nelson County Medical Society, was discussed at great length and after much deliberation the Reference Committee feels that this resolution should be rejected.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

There was considerable discussion in favor of and opposed to the passage of Resolution H, following which a vote was taken. The motion was defeated and Resolution H adopted.

Resolution N

Fayette County Medical Society

WHEREAS, the need for a uniform system of coding and nomenclature in order to describe accurately the great variety of medical services has long been present, and

WHEREAS, the American Medical Association has prepared an accurate and current system of coding and nomenclature, and

WHEREAS, State Medical Associations, specialty societies, and others have been delaying their own efforts so as to be certain there would be one uniform system of description of professional services, therefore be it

RESOLVED that this House of Delegates reaffirms its recent Board of Trustees support of Current Procedural Terminology, Second Edition, and be it further

RESOLVED that the Kentucky Medical Association House of Delegates urge all third party carriers to adopt the American Medical Association Current Procedural Terminology, Second Edition.

Recommendations, Reference Committee No. 4

Resolution N—Current Procedural Terminology, was introduced by Fayette County physicians. It was the Committee's feeling that this resolution will implement more accurate reporting of medical procedures and; therefore, recommends the adoption and implementation of this resolution.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Resolution O

Warren County Medical Society

WHEREAS, a news story and a subsequent editorial appeared in the *Louisville Courier-Journal* recently which were harshly critical of a number of Warren County physicians who do not file claims for fees under the Kentucky Medical Assistance Program, and

WHEREAS, the news story and the editorial received wide distribution and notice in the area served by the physicians whose practice they journalistically indicted, and

Whereas, discussions with persons named in the news story revealed that it contained errors of fact and was poorly verified, and

WHEREAS, protesting reports from numerous concerned physicians revealed that the editorial contained errors of fact and conclusions that indicated ignorance of both the Kentucky Medical Assistance Program and these physicians' management of the medical care of the beneficiaries of the program, therefore be it

RESOLVED, the Kentucky Medical Association rejects the criticisms of these Warren County physicians advanced by the *Louisville Courier-Journal*, insists that news media be factual in reporting such stories, and suggest careful research for editorials derived from them.

Recommendations, Reference Committee No. 4

Resolution O—Accuracy in News Reporting and Editorials, introduced by Warren County Medical Society, was considered at length; and although we are in sympathy with the objective and the facts of the resolution, we can see no useful purpose which will be served by its adoption. We therefore recommend that this resolution be rejected.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 4 as a whole as amended.

(Motion was seconded and carried.)

Mr. Speaker, I want to thank Doctors Glenn Baird, of Florence; Leslie Blakey, of Lexington; John McClellan, of Henderson; and Lowell Roberts, of McDowell, for their help in the lengthy hearings and preparation of this report.

I also wish to thank Mrs. Jackie Holloway.

REFERENCE COMMITTEE NO. 4

W. Neville Caudill, M.D., Louisville, Chairman
Glenn F. Baird, M.D., Florence
Leslie W. Blakey, M.D., Lexington
John W. McClellan, M.D., Henderson
Lowell F. Roberts, M.D., McDowell

REFERENCE COMMITTEE NO. 5

Frank A. Bechtel, M.D., Louisville, Chairman

Reference Committee No. 5 considered the following reports:

26. Report of the Advisory Committee to Selective Service

41. Report of the Coordinating Commission on Governmental Medical Services

42. Report of the Technical Advisory Committee on Physician Services (Title XIX)

43. Report of the Advisory Committee on Title XVIII

44. Report of the Claims and Utilization Review Committee

45. Report of the Committee on Applachian and OEO Programs

5. Report of the Chairman, Board of Trustees, Ad Hoc Committee to Study Peer Review Activities Report only

5. Report of the Chairman, Board of Trustees, Ad Hoc Committee on Health Manpower Report only

21. Report of the Advisory Committee to Blue Shield, paragraphs 3 through 5 on page 32 only

Resolution D—Medicaid (Allen County Medical Society)

Resolution E—Third Party Medicine (Allen County Medical Society)

Resolution M—Medicaid (Jefferson County Medical Society)

Resolution R—Health Oriented Programs (Floyd County Medical Society)

Report of the Advisory Committee to Selective Service

The purpose of this quasi-governmental Committee is to maintain as much as possible an appropriate balance and distribution of medical personnel between our civilian population and the Armed Forces.

The Committee met on March 23, 1971, at the request of the State Selective Service Headquarters, to review the records of 45 physicians, 17 dentists and two osteopaths to supply the Kentucky quota of 28 physicians, nine dentists and one osteopath to be called July 1, 1971, through October 31, 1971.

In years past, this Committee made recommendations as to whether the physician was more essential in his civilian practice than in military service.

Committee members were informed at this meeting that the April 23, 1970, Presidential Executive Order terminated all occupational deferments. The deferment clause had gone largely unnoticed nationally, since there had been no 1970 physician draft.

The Committee members expressed the opinion that this termination of occupational deferments was a backward step and would result in hardships to physicians and other health professionals "serving in critical areas of need."

Following the meeting, the Chairman corresponded with National Selective Service and by phone with Colonel Frederick J. Haase of the Executive Office of the President in regard to reinstating occupational deferments, and that delaying until March a call for July 1 was an insufficient time of notification.

Deferment provision action was recommended by many groups, including the National Security Council, the National Health Resources Advisory Committee, AMA, and many medical associations.

On May 3, 1971, the Selective Service System announced it had taken "extraordinary action" in response to community needs. Draft Director Curtis W. Tarr advised that, "A physician, dentist or allied specialist may be considered as essential to his community only if he is directly involved in patient care and his removal from the community would result in an extreme shortage of medical personnel to provide adequate health care."

The Committee members have been most cooperative, and KMA Headquarters has given us prompt and efficient support. Colonel Taylor Davidson and his staff of State Selective Service have been most helpful and cooperative.

It has been a pleasure to serve the Association. I will plan to appear before the appropriate Reference Committee at the September meeting to answer questions which may be asked concerning the work of the Committee.

Glenn U. Dorroh, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Advisory Committee to Selective Service and heard a supplemental report given by Glenn U. Dorroh, M.D., Chairman of this Committee. The Committee recommends that this report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Coordinating Commission on Governmental Medical Services

The Coordinating Commission on Governmental Medical Services met once during the past year to exchange information concerning activities of our various committees, which are related to Federal and State Government projects.

Reports were received from the Committee on Appalachian and OEO Programs, Frank M. Gaines, Jr., M.D., Chairman; Claims and Utilization Review Committee, Marvin A. Bowers, Jr., M.D., Chairman; Committee on Medical Education, Walter I. Hume, Jr., M.D., Chairman; Technical Advisory Committee on Physician Services (Title XIX), Donald Chatham, M.D., Chairman; and Advisory Committee on Title XVIII, Edward N. Maxwell, M.D., Chairman.

The progress and problems of these various committees are reported in detail in their individual reports. Concern by several of these committees resulted in the following motion: "The Coordinating Commission on Governmental Medical Services requests that it be KMA policy that the Executive Committee of the Board of Trustees consider more direct participation by the KMA in various health programs funded by Federal and State Governments, with the purpose in view to more adequately involve KMA in organization and operation of these health projects." It was felt that many government programs in existence or in the planning stages are operating without the advice and assistance of KMA and that we might more effectively express our ideas and influence their operation by being more directly involved in the management of these programs.

The Commission members reviewed a document submitted by AMA describing Federal committees, councils and agencies which utilize physicians in advisory positions. The AMA is requesting the names of physicians who might be interested in serving on any of these committees. It was recommended that this list of Federal Advisory Positions be kept on file at the KMA Headquarters Office and that anyone wishing to make recommendations for appointment to any of these committees submit the names of prospective appointees to the KMA Headquarters Office for transmittal to AMA.

The members of this Commission and of the five committees it represents are commended for their dedication and service.

Edward N. Maxwell, M.D., Chairman

Recommendations, Reference Committee No. 5

The Reference Committee reviewed the Report of the Coordinating Commission on Governmental Medical Services and recommends its adoption.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The five member KMA-appointed Technical Advisory Committee on Physician Services (Title XIX) is a quasi-governmental body called for by Kentucky statutes. It is one of seven provider groups "established for the purpose of acting in an advisory capacity of the Advisory Council for Medical Assistance."

This Committee met on four occasions and had a very excellent attendance. The year has been reasonably successful with the following accomplishments:

1. The Kentucky Medical Assistance Program has agreed to accept participating agreements from physicians in corporate practice.

2. An effort to correct over-utilization saw the implementation of a pilot program, which was termed the "lock-in project" and is being tried in ten counties with limitations placed on the number of prescriptions and physician office visits. Thus far it appears that this is being reasonably successful, but a more complete report will be obtained from the KMAP at each meeting of our Committee. The report given to our Committee at its last meeting was that some $45.00 per month per recipient is being saved by the "lock-in project." Approval for another six months was given.

3. The Title XIX carrier has agreed to accept billings from physicians showing usual and customary fees for services, paying the allowable fee and no longer returning the statements to the physicians with the request that the correct allowable fee be shown as his charge.

4. Recommendation for disciplinary action were made to the Title XIX carrier against five physicians and one osteopath who were abusing the Title XIX Program. It was recommended that charges against another physician be dropped.

5. It has been recommended to the Advisory Council for Medical Assistance that consideration be given to charging a token fee of 50 cents for each prescription in order to reduce over-utilization of drugs.

6. The Formulary Subcommittee has been at work and has successfully made several significant changes in the formulary for Title XIX recipients.

7. The KMA Claims and Utilization Review Committee, chaired by Marvin A. Bowers, Jr., M.D., and serving as the review arm for our Committee, has been diligently at work, and we are most grateful for the fine service his Committee has rendered to KMA.

8. Emanuel Rader, M.D., has been working as a part-time medical consultant to the Title XIX Program. Mr. James Rogers has been named Director of the Medical Assistance Division of the Department of Health, and Mr. Jack Waddell is the new Director of the Division of Medical Assistance of the Department of Economic Security.

Our Committee has enjoyed a very fine relationship with all members of the State Department of Health and Economic Security, and we look forward to the continuation of our fine working relationship.

Donald Chatham, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Technical Advisory Committee on Physician Services (Title XIX) and recommends its adoption.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee on Title XVIII

This Committee met twice during the past year with representatives of the Medicare carriers in attendance to discuss problems encountered both by the physicians and the carriers in administering this program. Numerous specific complaints from individual physicians in the State were concerned chiefly with problems of the extended care facility guidelines and with the establishment of fee profiles and percentile limitations upon same.

The extended care facility problem appears to be acute throughout the State due in part to misunderstanding of guidelines and in part to the very restrictive nature of these guidelines, and these complaints have been forwarded through the carriers to the Social Security Administration. We hope that some action may be taken before this portion of the program becomes completely inoperable.

It is noted that a new profile of charges has been instituted by Metropolitan based on the usual and customary charges submitted by physicians for the year 1969. These new profiles went into effect on January 1, 1971. Metropolitan hopes that by the fall of 1971, profiles based on the charges for 1970 may supplant the 1969 profile. We note that at the same time as the institution of the new 1969 profile payments the percentile cutoff point was reduced from the 83rd to the 75th percentile, and this has resulted in sufficient reductions in allowances to offset the gains offered by the new 1969 profile so that the total payment remained about the same as in previous years. These rulings are established by legislation and it appears to the Committee that Metropolitan is performing a conscientious effort to provide increases as permitted by legislation.

The "lock-in" experimental program in several areas has apparently resulted in considerable decrease in over-utilization of physicians' services by the patient. Problems relating to insufficient information to substantiate unusual charges, improper identification of patients, and failure to instruct clerical personnel submitting forms regarding the fact that additional charges to the patients beyond the deductible

amounts cannot be approved when assignment is accepted continue to cause considerably delay in approval of certain payments. Metropolitan's new computer system appears to have finally caught up with the backlog of claims occasioned by the conversion to the new system and prompt payment of properly filed claims should now be expected.

We appreciate the interest and diligence of our Committee members during the past year.

Edward N. Maxwell, M.D., Chairman

Recommendations, Reference Committee No. 5

The Reference Committee reviewed the Report of the Advisory Committee on Title XVIII and recommends its adoption.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Claims and Utilization Review Committee

The KMA Claims and Utilization Review Committee met once as a whole during this Associational year, and as of the end of July, six Executive Committee sessions have been held. In these meetings, we have reviewed 121 cases of 33 physicians. None of the above figures properly represents the problem within Kentucky.

We may have claims of physicians with 100 cases each referred to us by the fiscal agent for the Kentucky Medical Assistance Program (Title XIX) or by the carrier for the Title XVIII, Medicare Program. These figures do represent the volume of review work performed by the Committee.

The increased work load of our family practitioner member, H. Burl Mack, M.D., has required the addition of two new family practitioner members to the Committee bringing the total membership to 22. The new members are William E. Becknell, M.D., of Manchester, Kentucky, and Francis J. Halcomb, Jr., M.D., of Scottsville, Kentucky.

The KMA Claims and Utilization Review Committee has protected physicians of Kentucky in the past on claims in which the third party had made unsatisfactory adjustments of their charges for services rendered.

Great strides in peer review have been made within the past year throughout the United States. We have continued to be in the front of this professional activity.

Members, staff, and the Chairman have attended regional and national meetings lending to the exchange of information of our problems and theirs. The Chairman has met with six of the Trustee Districts in Kentucky to discuss peer review.

Currently, our Committee is implementing a $22,600 grant from the Comprehensive Health Planning Office for instruction of the Trustee District Claims and Utilization Review Committees.

The Committee is also working with the University of Kentucky College of Medicine to establish a physician retraining and rehabilitation program.

The Chairman wishes to express his appreciation to all of the members of the Claims and Utilization Review Committee for their conscientious efforts to provide quality medical care at the most reasonable cost (working in the best interest of the people, the medical profession, and our voluntary system).

Marvin A. Bowers, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

The Report of the Claims and Utilization Review Committee was reviewed by Reference Committee No. 5. There were several questions from the floor regarding the availability of retraining and rehabilitation programs for physicians who have had problems in the area of claims and utilization. The Committee was apprised that the program for physician retraining and rehabilitation is in process. The Committee recommends that this report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Appalachian and OEO Programs

The Committee held four meetings during the year. The first meeting at KMA Headquarters in Louisville was held with Mr. Dan Tuttle, Director of the Health Program in the Appalachian Program. He reviewed the plans for the next two years which are generally in line with the program planning of the past. Two of the Committee members are on the board of the Appalachian programs and have monitored this through their personal experience.

The second meeting of the Committee was held in Harlan, Kentucky where we again met with Mr. Tuttle, who outlined a proposed federal grant to establish Health Maintenance Organization in Southeastern Kentucky under the leadership of the Appalachian Health Program. The Committee then made tours of the various facilities supported by Appalachian Program funds in and around Harlan.

The third Committee meeting was held in Prestonsburg, Kentucky in May following the appearance of a number of newspaper and magazine articles concerning problems with the Floyd County Comprehensive Health Center funded by the OEO. The Committee members along with representatives from the University of Kentucky Medical Center as guests interviewed physicians in Floyd County who had personal knowledge on both sides of the controversy. As a follow-up of this meeting, a fourth meeting was held at KMA Headquarters in Louisville in June to further interview physicians in the Floyd County program and also to meet with a medical representative from the OEO office in Washington. A more detailed summary of the Committee's deliberations will be prepared at a later time for submission to the Board of Trustees.

Frank M. Gaines, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Appalachian and OEO Programs. We feel that the discussion of the problem in the Committee's report regarding the Floyd County Comprehensive Health Care Program funded by the Office of Economic Opportunity is inadequate, and that it is most urgent that fuller coverage of this subject be presented by the Committee on Appalachian and OEO Programs to the Board of Trustees and, in turn, to the full membership of the Association. Reference Committee No. 5 recommends acceptance of this report.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Ad Hoc Committee to Study Peer Review Activities Report

The Ad Hoc Committee to Study Peer Review Activities met three times during the 1970-71 Associational year and has performed the survey directed by Resolution D, passed by the 1970 KMA House of Delegates. The resolution called for a study of the advisability and feasibility of compensating physicians for peer review activities.

I. Study of Peer Review Activities

The Committee studied developing patterns in peer review and feels that the amount of peer review activity can be reasonably expected to increase in the future. Several factors may produce this increase. Legislative proposals currently under consideration relating to federally supported health insurance programs virtually all require extensive review activities. The expansion of the foundation concept of medical care will require effective peer review. New and improved programs by insurance companies will require similar activities. Awareness on the part of physicians and greater availability of local and regional peer review committees will increase dependence on these committees and physician involvement at all levels of peer review. All of these activities reflect a new trend in peer review. Education is not the only goal of peer review. Effective peer review is becoming the cornerstone of economic feasibility in health care systems.

If peer review cannot produce optimum utilization and quality of care, then other extrinsic mechanisms will develop of necessity to assure that amount and quality of care. Systems of health care freeing the patient from financial burden at the point of service will surely spread in the immediate future. Such systems operated without adequate control can lead only to chaos. As peer review expands to provide that control, the figures we report will become only baselines and historical minimums.

In order to evaluate the availability of information concerning physician involvement in peer review on a nation-wide basis, inquiries were sent to the American Medical Association and to each state medical association requesting their figures on physician hours expended. Responses were received from 28 states. Five states indicated that they were contemplating conducting similar studies. Many provided information on the amount of activities at the state association level. Only one state, Kansas, was able to give figures representing peer review activities on a state-wide basis. A 1968 study conducted there estimates that 14,000 hours were expended in peer review activities in a one-year period by the 2,000 practicing physicians in Kansas. We have heard from an AMA staff member that information is not available on the amount of time physicians are spending in peer review across the country. Quoting from the AMA reply, "the time is substantial and some individuals have already raised the question whether the time and energy expended on review programs by physicians are justified by the results."

A survey was designed by the Ad Hoc Committee to Study Peer Review Activities to develop current figures for peer review in the state of Kentucky. Inquiries were sent to each hospital, extended care facility and county medical society in the State requesting monthly data on peer review for a four-month period from February to May, 1971. This study included figures representing hospital utilization review, admissions review, and other time required outside regular committee meetings for utilization review and admissions review. The same breakdown was attempted for extended care facilities, as well as county medical society peer review committees. The results are on the succeeding tables. Approximately 90 per cent of the in-hospital peer review activities going on in the state of Kentucky at the present time consists of in-hospital utilization review by the medical staff, with little admissions review.

The Committee members feel that the figures as reported are accurate for the institutions reporting for the period surveyed. Projecting these figures to a one-year period presupposes a steady level of peer review activity throughout the year.

Correction of the figures for the percentage reporting (77.5% of hospital beds and 42.7% of nursing homes) produces a greater chance for error, but is necessary if a fair picture of peer review throughout the State is to be obtained. The Committee members feel that sufficient returns were obtained and that

sampling was representative enough to assure reasonable accuracy. The total figures for physician hours per year on a state-wide basis are: Hospital, 19,200; Nursing Home, 3,300.

II. Compensation

In the Committee's discussion of compensation, it became apparent that the desirability of compensation was related to the type of review. We can find nothing wrong with physicians being compensated for review in hospitals where they are not staff members, nursing homes, county and state medical societies or foundations. Justice would, in fact, require that compensation be available for such review. This review is being done for the benefit of people other than the physicians or their patients. Compensation should be provided by the third party involved to the reviewing physician. Individual physicians should be free to refuse compensation if they wish. The Committee's studies revealed that in most cases where compensation is currently made for such review, the compensation is at a minimum rate of $25 per hour or at $5 per case.

We basically agree with the concept of AMA as printed in the "Peer Review Manual," Volume 1, Appendix C, Pages four through seven, which is a portion of Report G of the Council on Medical Services to the 1969 AMA House of Delegates.

The crux of the problem is the matter of compensation for utilization review in hospitals, particularly those of which a physician is a member of the staff. There are many reasons which might be cited for physicians feeling they should be compensated for this. Historically, there has been increasing encroachment upon physicians' time, beginning with the urging of the Joint Commission for the Accreditation of Hospitals to upgrade hospital staff activities. This has produced increasing numbers of committees, such as records, house staff, tissue, pharmacy, and patient care committees. The passage of the Medicare Act accelerated the demands on physicians' time for administrative activities. The development of administrative tasks requires time which must be taken from a physician's already limited number of available hours. The physician faced with increased demands on his time may choose to decrease his personal activities, decreasing the amount of time available for his family, for his church, and service to his community. Alternately he may reduce the amount of his professional activity, decreasing the number of hours available for patient care. This latter course may exert subtle inflationary pressures or deleterious effects on patient care. Rather than choosing one of the above, the physician may elect to devote less time and effort to peer review activities than that which would ideally be required and ultimately turn his back completely on peer review. It should be noted that in peer review a physician is providing a service for which he is uniquely qualified and that these services are, for the most part, requested by third parties.

However, there are compelling reasons against compensation of physicians for hospital-based peer review at the present time. It would appear that the benefits to the physician and the patient, and the assurance of bed availability when most needed are now sufficient to justify utilization committees apart from their services to third-party carriers. This clearly represents a function of the medical staff not greatly different from the other medical staff committees. If and when the requirements of third-party carriers increase to the point that physician reviews serve the financial needs of the third party more than they serve the needs of improved patient care and staff education, then compensation for peer review at a hospital level will be justified. The Committee recognizes that in some communities this is already the situation, and feels that compensation of physicians in those places is appropriate.

In the course of its deliberations, it has become apparent to the Committee that there are many areas open for improvement in peer review. Development of more efficient and adequate guidelines of peer review is in order. Such criteria should take into account the conditions of practice within each community and the needs in review for large as well as small hospitals. This will hopefully produce review which is more meaningful according to the needs that exist in individual communities and more efficient use of physician time. Peer review must also be divided more evenly among all physicians in the State.

The Committee is aware of the development of Trustee District Claims and Utilization Review Committees and the contemplated educational course to be directed at physicians throughout the State. We highly commend this project.

As a final proposal, this Ad Hoc Committee recommends that these matters, especially those related to the changing requirements of peer review, be kept in continued consideration by the existing KMA Claims and Utilization Review Committee.

This information could not have been gathered without the generous help of the individual Trustees who provided follow-up information about hospitals in their districts. The Committee members are most grateful to them.

The members of this Committee, Thomas L. Heavern, M.D., Chairman; Jeffries L. Blackerby, M.D.; C. Nicholas Kavanaugh, Jr., M.D.; Prue W. Kelly, M.D.; Leslie Van Nostrand, M.D.; and Gerard A. Weigel, M.D., spent long hours compiling this data and discussing these problems. All members attended the first two meetings (three hours for each meeting). All but one attended the final five-hour meeting.

REPORTED PEER REVIEW TIME IN HOSPITALS

Trustee District	Total Review Time (In Hours) Feb.	Mar.	Apr.	May	Total	Number of Beds Reported Feb.	Mar.	Apr.	May	Average No. of Beds in Hospitals
1	75	74	68	72	289	664	588	588	588	747
2	60	55	54	25	194	808	873	873	277	926
3	70	56	63	67	256	603	598	648	662	688
4	65	49	49	49	212	224	292	292	292	444
5	437	132	255	109	933	3,112	3,185	2,727	2,006	3,493
6	97	76	86	42	301	714	814	769	705	826
7	24	18	24	14	80	267	236	266	181	462
8	46	30	29	23	128	861	738	765	770	838
9	38	36	50	46	170	275	398	438	345	556
10	250	262	314	261	1,087	1,394	1,258	1,258	1,258	1,661
11	16	26	31	18	91	86	324	324	324	334
12	78	110	110	110	408	461	416	416	416	465
13	19	69	61	57	206	404	577	577	577	577
14	37	32	35	28	132	288	252	252	252	803
15	64	138	138	138	478	387	727	727	727	765
Monthly Totals	1,376	1,163	1,367	1,059	4,965	10,548	11,276	10,920	9,380	13,585

Average Time Spent Monthly for Hospital Peer Review: 1,241 hours

Annual Projection: 14,892 hours

Note: Figures listed above are rounded off to nearest whole number.

REPORTED PEER REVIEW TIME IN EXTENDED CARE FACILITIES

Trustee District	Total Review Time (In Hours) Feb.	Mar.	Apr.	May	Total	Number of ECF's Reporting Feb.	Mar.	Apr.	May	Number of ECF's
1	13	11	10	11	45	5	4	4	4	8
2	15	8	13	14	50	4	4	3	3	7
3	12	15	0	0	27	3	2	0	0	6
4	5	8	8	8	29	2	4	4	4	5
5	59	3	37	13	112	6	2	6	3	8
6	9	4	8	3	24	5	2	3	1	8
7	8	1	18	19	46	1	1	1	2	4
8	8	3	5	1	17	4	3	3	2	5
9	6	3	3	0	12	1	1	1	0	3
10	6	27	24	11	68	1	3	3	2	4
11	0	2	3	0	5	0	1	1	0	2
12	4	3	3	3	13	2	2	2	2	4
13	3	3	4	3	13	1	1	1	1	2
14	7	0	0	0	7	1	0	0	0	2
15	3	0	0	0	3	1	0	0	0	4
Totals	158	91	136	86	471	37	30	32	24	72

Average Time Spent Monthly for Extended Care Facilities Review: 118 hours

Annual Projection: 1,416 hours

Note: Figures listed above are rounded off to nearest whole number.

PEER REVIEW TIME REPORTED BY COUNTY MEDICAL SOCIETIES

Trustee District	County Society	Physician Time in Committee Meetings (in hours) Feb.	Mar.	Apr.	May	Total	Physician Review Time Outside Meetings Feb.	Mar.	Apr.	May	Total	Total Time
2	Daviess		no figures reported						no figures reported			0
2	Henderson	11	11	11	1	34	0	21	11	0	32	66
3	Pennyrile		no figures reported						no figures reported			0
4	Hardin-Larue		no figures reported						no figures reported			0
5	Jefferson	21	37	25	5	88	2	33	15	0	50	138
6	Barren		no figures reported						no figures reported			0
6	Logan	—	—	4	4	8	—	—	4	4	8	16
6	Warren		no figures reported						no figures reported			0
7	Franklin	—	—	4	—	4	—	—	0	—	0	4
8	Boone		no figures reported						no figures reported			0
8	Campbell-Kenton	7	—	—	—	7	10	—	—	—	10	17
9	Mason	2	4	2	14	22	16	0	2	3	21	43
10	Fayette	5	2	5	0	12	0	0	0	0	0	12
12	Boyle		no figures reported						no figures reported			0
12	Pulaski		no figures reported						no figures reported			0
13	Boyd	—	5	4	5	14	—	5	0	0	5	19
13	Rowan		no figures reported						no figures reported			0
14	Letcher	—	4	4	—	8	—	0	0	—	0	8
14	Perry		no figures reported						no figures reported			0
14	Pike		no figures reported						no figures reported			0
15	Bell		no figures reported						no figures reported			0
15	Harlan	6	2	—	—	8	0	0	—	—	0	8
15	Whitley	2	2	2	2	8	2	2	5	3	12	20
Totals		54	67	61	31	213	30	61	37	10	138	351

Average Time Spent Monthly for County Medical Society Peer Review: 88 hours
Annual Projection: 1,056 hours

Note: Figures listed above are rounded off to nearest whole number.

Tabulation contains figures of those societies having active peer review committees separate from hospital review committees. Societies known to have committees but not reporting are also listed.

When no report was received for the month from a society, the symbol "—" is used. When the society reported no time spent in peer review for the month the "0" is used.

REPORTED PEER REVIEW TIME BY KMA CLAIMS AND UTILIZATION REVIEW COMMITTEE

Month	Physician Hours in Meetings	Outside Time	Total
February	42	30	72
March	5	3	8
April	No meeting in April		
May	18	9	27
Totals	65	42	107

Average Time Spent Monthly by Committee: 36 hours

Annual Projection: 432 hours

Note: Figures shown are in hours and rounded off to the nearest whole number.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Chairman, Board of Trustees, Ad Hoc Committee to Study Peer Review Activities only. The Reference Committee wishes to compliment the Ad Hoc Committee on its performance of a difficult task and hopes the full membership of KMA will benefit by publication of the Report of the Ad Hoc Committee to Study Peer Review Activities. The Reference Committee recommends that this report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Ad Hoc Committee on Health Manpower Report

The Ad Hoc Committee on Health Manpower was appointed by the KMA Board of Trustees at the request of the Chairman of the State Comprehensive Health Planning Council Task Force on Health Manpower. The purpose of this Committee is to recommend to the Task Force "how more medical doctors could be educated in Kentucky or brought into practice in Kentucky."

The Ad Hoc Committee met on June 3, 1971, reviewing in depth the problem. A detailed report of the

Committee's recommendations has been presented to the Board of Trustees.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Chairman, Board of Trustees, Ad Hoc Committee on Health Manpower Report only, and recommends the acceptance of this report.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee to Blue Shield, Portion Concerning Utilization Review

The Committee devoted considerable amount of time to discussion of Utilization Review. And it was brought to the attention of the Committee that an ongoing Utilization Review Program is a membership requirement for Blue Shield and Blue Cross to the National Associations. Blue Shield and Blue Cross are currently conducting studies to develop a more sophisticated program of Utilization Review and reported that a primary resource for Utilization Review is meaningful data to establish parameters and guidelines for an effective review process. As a result of the data need, Blue Shield has been studying the feasibility of a data gathering system for institutional services. One program having apparent success in this endeavor is the Hospital Utilization Project of Western Pennsylvania (HUP).

Blue Shield has advised the Kentucky Medical Association and the Kentucky Hospital Association of the intent of such a project which must be approved by both organizations before it can be considered for implementation. If implemented, it would, upon request, be available to provide information to be used in many types of reviews and it would include data from all cases in an institution in addition to those covered by Blue Cross and Blue Shield.

Your Advisory Committee wishes to reiterate that a data gathering system would also be of great help to utilization committees in hospitals and recommends that KMA endorse and support a data collecting program, such as the Hospital Utilization Project of Western Pennsylvania, to be implemented with Kentucky Blue Cross and Blue Shield, provided the Board of Trustees received details on this project and is in agreement with it.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the portion of the Report of the Advisory Committee to Blue Shield relating to utilization review and recommends the adoption of these paragraphs.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Resolution E

Allen County Medical Society

WHEREAS, it is now clear that both major political parties in the United States, The American Public Health Association, and even our own American Medical Association, have proposed some type of compulsory national health scheme which would be totally, or in part, financed by federal tax dollars, and

WHEREAS, any compulsory national health scheme will either suddenly or gradually, over a period of years, lead to total compulsory socialized medicine, administered by our Federal Government, and

WHEREAS, the majority of the bureaucrats who will administer this program will not necessarily have any knowledge of medicine, or the delivery of quality medical care, but will be more politically oriented and more interested in giving some type of inadequate medical care to each voter, and

WHEREAS, it seems that many of the officers and delegates of our national, and many of our state, medical organizations have recently spent much of their time working for individual advancement rather than for the good of the organization, and have thus often lost members and support of members, and

WHEREAS, the great and honorable state of Kentucky has produced many famous pioneers in the fields of surgery, obstetrics, medicine, and nursing, and

WHEREAS, the need exists for a medical labor relations type of organization for purposes of protecting the medical practitioners rights and working conditions when dealing with government or other third party administrators in the delivery of health care, therefore be it

RESOLVED, that the Kentucky Medical Association honor the State of Kentucky by pioneering the organization of a Medical Labor Relations Committee either as an arm of the KMA or as an independent organization, be it further

RESOLVED, that the Kentucky Medical Association encourage and stimulate our sister state medical organizations to participate in this movement in order to develop a strong and unified physicians organization to effectively deal with governmental agencies and other third parties involved in the delivery of health care.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution E, introduced by the Allen County Medical Society, concerning Third Party Medicine. Resolution E was unacceptable to the Reference Committee since it does not take cognizance of multiple committees of the KMA that have labored in the past to foster working relationships between government and third party carriers and to improve benefits to patients. The resolution implies the formation of a labor-union type organization whose only recourse to implementation of its demands is by failing to provide services, which is contrary to the basic principles of the

practice of medicine. The Reference Committee recommends the rejection of Resolution E.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution R

Floyd County Medical Society

WHEREAS, the individual physicians of the KMA cannot always determine the advisability of participation in health oriented programs which are initiated from outside the State, be it further

RESOLVED, that any health program from outside the State which enters a state must have the stamp of approval of the Kentucky State Medical Association and/or the State Board of Health before being implemented within the state.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution R, introduced by the Floyd County Medical Society, concerning Health Oriented Programs. The Committee was in sympathy with the spirit of this resolution, but feels that to make it more effective some revisions should be made.

The Reference Committee, therefore, recommends the rejection of Resolution R and offers a substitute resolution as follows:

WHEREAS, the individual physicians of the Kentucky Medical Association cannot always determine the advisability of participation in health oriented programs which are initiated from outside the State, therefore be it

RESOLVED, that any health program from outside the State which enters Kentucky must have the stamp of approval of the Kentucky Medical Association and the State Comprehensive Health Planning Council before being implemented within the State and that physicians should not accept programs or participate therein without prior approval of the aforementioned organizations.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution D

Allen County Medical Society

WHEREAS, the Kentucky Medical Assistance Program has failed to adequately provide for the medically indigent of Kentucky as intended by Congress and understood by the citizens of our great and free country, and

WHEREAS, the KMAP is such a poorly programmed and administered program that it is ready-made for over utilization and abuse by the few greedy and unethical providers who wish to abuse it, as well as the many recipients who have a similar desire, and

WHEREAS, the Kentucky Medical Assitance Program has been poorly administered since its inception, and is still poorly administered in spite of some effort made by the Kentucky State Department of Health to improve this administration in the past year, and

WHEREAS, the KMAP program is loaded with persons who are neither needy nor indigent and many of these recipients have their own private insurance, the proceeds of which they take and spend for personal use while the taxpayer and medical care providers subsidize their medical expenses, and

WHEREAS, the Department of Economic Security is responsible for qualifying recipients under the KMAP program, and neither the Kentucky State Department of Health nor the providers of service under the program have any power to see that only needy persons are covered by the program, and

WHEREAS, incorrect and misleading information has been given to the press by the administration of KMAP; to wit: Information that usual and customary fees are paid to all providers of service under the program, when actually no fees are paid for surgical or obstetrical services and only token fees are paid for medical service to hospitalized patients; and that these fees are paid promptly after services are rendered and bills submitted, when actually many bills are never paid and others often only after months have passed from time of billing; and that the indigent do not have adequate access to medical care, when actually most physicians spend about 15 to 20 percent of their time rendering uncompensated service to the indigent, and

WHEREAS, it is obvious that administrative expenses of the KMAP program by governmental agencies are excessive, even though the administrators of the program refuse to submit to the public taxpayer a financial statement indicating the way the taxpayer's money is spent, and

WHEREAS, even though the Kentucky Medical Association House of Delegates passed Resolution K concerning Medicaid in the 1970 session, very little improvement has been made in the program or its administration, and

WHEREAS, it is the feeling of the Allen County Medical Society that there has been a breach of good faith on the part of the KMAP administration, therefore be it

RESOLVED, that the Kentucky Medical Association inform its membership of the lack of good faith on the part of the KMAP and release the members from their commitments to cooperate and participate in the Kentucky Medical Assistance Program, be it further

RESOLVED, that the House of Delegates of the Kentucky Medical Association hereby withdraw its approval of the Kentucky Medical Assistance Program effective October 1, 1970, be it further

RESOLVED, that the Kentucky Medical Association withdraw all Kentucky Medical Association committees to the Title XIX Program, be it further

RESOLVED, that the House of Delegates urge the members of the Kentucky Medical Association to continue rendering high quality care to all persons regardless of their ability to pay, and without the bureaucratic, dictatorial, and wasteful interference of governmental third parties.

Resolution M

Jefferson County Medical Society

WHEREAS, the Kentucky Medical Assistance Program continues to unrealistically provide for the medically indigent of this Commonwealth as intended by Congress or understood by the public, and

WHEREAS, the Kentucky Medical Association has, since 1960, cooperated with all branches of state government including the Health Department and Department of Economic Security in *good faith,* providing leadership and untold hours, days, and weeks of officers, and other physicians, time and professional talent in an effort to make the program work for the best interest of the poeple, and

WHEREAS, the program continues to be underfinanced, and falsely presented to the public, the Kentucky Medical Association again wishes to inform the State Legislature, the Congress of the United States, and the people of Kentucky about some of the important facts which have caused this impossible situation, and

WHEREAS, during the last fiscal year (June 1970-71) many thousands of surgical operations were performed on Medicaid patients. The Medical Assistance Program does not provide physicians with any compensation for the performance of surgical procedures on these patients. The only "in hospital" benefits paid physicians for Medicaid patients is a small consultation or attendance fee, and

WHEREAS, by the calculation of less than an average fee for each of these surgical Medicaid patients, it is immediately evident the physicians of Kentucky are subsidizing the Medicaid program an estimated two million dollars per year for surgical patients and similar sums for 18,000 hospitalized seriously ill patients not requiring surgery, and

WHEREAS, there are other inequities to the program where physicians are expected to provide their professional services at far less than the usual, reasonable, and customary fees charged by doctors in the community, and

WHEREAS, compensation for in-patient hospital services available to physicians under the Medicaid program, with few exceptions, requires that the physician accept a fee less than that provided by the average standard health insurance policy; and further no other provider of health services has been expected to continue to provide services without just compensation, and

WHEREAS, the program further leads the public to believe that doctors are paid adequately for all services, and

WHEREAS, we believe few if any other providers of service paid for by the government through taxes receive equally shabby or discriminatory treatment, and

WHEREAS, this Society realizes that a similar resolution was submitted on this subject to the KMA House of Delegates last year and was passed. We believe, however, that it is worthwhile to re-emphasize the deficiencies in the Medicaid program of Kentucky with an attitude of constructive criticism until the deficiencies are corrected, now therefore

BE IT RESOLVED, that this resolution, be provided to the Congressman and Senators from Kentucky as well as the Governor and responsible officers in the Commonwealth requesting that the facts regarding Medicaid be made known to the public so that they may understand why physicians find it economically difficult to continue seeing and caring for patients under the Medicaid program, and

BE IT FURTHER RESOLVED, a copy of this resolution be provided to the news media in order that the public be better informed regarding the fact that, in the future, physicians may prefer to see indigent patients in the manner of honored tradition rather than to accept the false premise and conduct of Medicaid.

Recommendations, Reference Committee No. 5

The Reference Committee reviewed Resolution D—Medicaid (Allen County Medical Society) and Resolution M—Medicaid (Jefferson County Medical Society). The Reference Committee heard extensive testimony regarding both Resolution D and Resolution M. Resolution D, as resolved, would be incompatible with continued participation in the Title XIX (Medicaid) Program. The Reference Committee recommends the rejection of Resolution D and the adoption of Resolution M.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

A lengthy discussion ensued and the following amendment that an additional resolve be added to Resolution M was moved and seconded: "Be it further resolved that the House of Delegates of the Kentucky Medical Association go on record as strictly disapproving the Kentucky Medical Assistance Program as it is presently administered." The amendment carried by a 61 to 52 margin, and the report of the Reference Committee was adopted as amended.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 5 as a whole as amended.

(Motion was seconded and carried.)

Mr. Speaker, I would like to thank each member of this Committee for his help in reviewing these reports and writing the Reference Committee report, and Mrs. Doris Crume for her assistance.

REFERENCE COMMITTEE NO. 5

Frank A. Bechtel, M.D., Louisville, Chairman
Harold L. Bushey, M.D., Barbourville
Stephen B. Kelley, M.D., Somerset
Richard B. McElvein, M.D., Lexington
N. H. Talley, Jr., M.D., Princeton

REFERENCE COMMITTEE NO. 6

W. Vinson Pierce, M.D., Covington, Chairman

Reference Committee No. 6 considered the following reports:

11. Report of the Judicial Council

12. Report of the Rural Kentucky Medical Scholarship Fund, Board of Trustees

24. Report of the Committee on Medical Economics

27. Report of the Committee to Study the Constitution and Bylaws

28. Report of the Interim Meeting Program Committee

29. Report of the McDowell House Board of Managers

30. Report of the Memorials Commission

46. Report of the Committee on Plans and Development

5. Report of the Chairman, Board of Trustees—Building Addition matters—Last paragraph, page 9; paragraph 13, page 10; paragraphs 7, 8, 9 and 13, page 11; and the Building Committee Report only

5. Report of the Chairman, Board of Trustees—Medical Economics Committee matters—Paragraphs 9, page 10 and paragraph 14, page 11 only

21. Report of the Advisory Committee to Blue Shield—Next to last paragraph on page 31 and paragraphs 1 and 2 on page 32 only

Resolution B—KMA Emeritus Membership (Fayette County Medical Society)

Resolution G—Rural Kentucky Medical Scholarship Fund (Fayette County Medical Society)

Resolution K—KMA Membership Clarification of Interns and Residents (KMA Board of Trustees)

Resolution P—Admission of Members to the KMA (Floyd County Medical Society)

Report of the Judicial Council

Because of an increase in its volume of work, the Judicial Council found it necessary to meet six times this year and faces the prospect of monthly meetings in the not-too-distant future. Eight complaints against physicians by their patients; three complaints by one or more physicians against another physician; two complaints by the Claims and Utilization Review Committee and three criminal convictions were considered by the Council. In addition, the Council rendered six opinions on questions of ethics and filed a suit (authorized by the Board of Trustees) to enforce its ruling that it is unethical for physicians or their immediate families to own stock in drug companies small enough to have their profits influenced by the prescription-writing habits of the stockholder-physician.

Actions of general interest to the profession included the following:

1. Advised the membership (through the *Communicator*) that it is important for patients to be informed of the services of hospital-based physicians, surgical assistants and consultants so that they will not be surprised when they receive a bill for these services.

2. Notified two hospital-based physicians that if they are to continue to allow the hospital to bill and collect their fees, the bill *must* clearly identify the hospital as a collecting agent, only.

3. Approved, for one season on an experimental basis, the opening of a first-aid station in the "Land Between the Lakes," staffed by RN physician-assistants who would be supervised by seven nearby physicians on an "on call" basis. Results are to be written up and evaluated during the winter of 1971-72.

4. Advised a physician that ownership of stock in "Extendicare" would not be unethical.

5. Advised a hospital that it cannot allow its pharmacy to fill prescriptions unless they are signed *when presented* (and not later "countersigned") by a licensed physician, and that it would be unethical for a physician to sign prescriptions for patients he did not examine.

6. Inquired of a book reviewer for the *Wall Street Journal* as to any substantiating evidence he might have, or be able to acquire from the author of *In a Kentucky Hollow, Life Goes On—Barely*, for the statement contained in the book and repeated in the review, that there were, in Appalachia, "doctors who never see the patients but collect fortunes from Medicaid." The reviewer has replied that he has no personal knowledge of this but will refer our inquiry to the author as requested.

7. Condemned physician-affiliation with or utilization of "abortion-referral" agencies in New York and any other state which has legalized abortions.

8. After hearings, permitted a physician to resign (with leave to reapply in one year) where it appeared that numerous serious irregularities in his Medicare claims did not result from any fraudulent intent.

9. After a hearing, expelled a physician whom it found guilty of "excessive faults in giving dangerous drugs ('not always indicated by the diagnosis') in incorrect dosages, as well as administering them improperly" with leave to reapply in two years.

10. After a hearing, placed on probation for six months, a physician found guilty of "indiscriminate prescription and dispensation of medication" to his Medicaid patients, with directions to obtain additional instruction in internal medicine during the probationary period and to submit his current claim records for review at the end of that period.

11. Ordered a physician who had pled guilty to one charge of criminal assault and another charge of criminal abortion to show cause at the August meeting of the Council why his membership should not be revoked.

The Council will meet on August 19, 1971, which is within this Associational year, but because reports must be in by August 4, actions taken at that meeting will have to be included either in a supplemental report this year, or in next year's report.

The active assistance of the entire membership in uncovering instances of unethical conduct is again solicited.

N. Lewis Bosworth, M.D., Chairman

Recommendations, Reference Committee No. 6

The Report of the Judicial Council was considered. The Judicial Council has had an increase in the volume of its work, so that they now find it necessary to meet almost once monthly. In their report, they pointed out that they had considered eight complaints against physicians by their patients, three complaints by one or more physicians against another physician, and two complaints by the Claims and Utilization Review Committee; three criminal convictions were considered by the Council.

In addition, the Council rendered six opinions on the question of ethics, and they also filed a suit to enforce the ruling of the Council that it is unethical for physicians to own stock in drug companies small enough to have their profits influenced by the prescription-writing habits of the stockholder-physician.

The Council approved the opening of a first-aid station in the "Land Between the Lakes," staffed by RN physician-assistants, on an experimental basis.

The Council, after hearings, permitted a physician to resign (with leave to reapply in one year) where it appeared that numerous serious irregularities in his Medicare claims did not result from any fraudulent intent.

One physician had his membership revoked because of a proven charge of criminal assault and another charge of criminal abortion.

Another physician was expelled because of "excessive faults in giving dangerous drugs in incorrect doses" with leave to reapply in two years.

Another physician, after hearing, was placed on probation for six months because of "indiscriminate prescription and dispensation of medication" to his Medicaid patients. He was instructed to take additional study in regard to proper prescription of medications.

The Counicl expressed the need that there should be improved communication between physicians and their patients and between physicians and other physicians.

The Reference Committee commends the Council for its dedication to its duties and for its courage in taking proper disciplinary actions where such were needed.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Rural Kentucky Medical Scholarship Fund

This is the Silver Anniversary year of the Rural Kentucky Medical Scholarship Fund.

The Board of Trustees of the Fund designated the new applicants for 1971 as the "C. C. Howard, M.D., Silver Anniversary Class," in honor of the retiring Chairman of the Fund. Doctor Howard, Glasgow, Kentucky, formally submitted his resignation after 25 years of leadership to one of the nation's pioneer scholarship fund's for medical students.

Gaithel L. Simpson, M.D., Greenville, Kentucky, Vice-Chairman of the Fund since 1954, was elected to succeed Doctor Howard as Chairman. Russell Hall, M.D., of Prestonsburg, was elected Vice-Chairman, and William P. McElwain, M.D., Frankfort, Commissioner of Health, was named Treasurer.

The Board of Trustees approved 36 loans amounting to $80,000 to medical students for the coming school year. A record of 17 loans were made to new first-loan applicants.

The Fund now has 167 physicians in practice in 86 Kentucky counties with 15 serving in "critical" counties.

All loans and contracts are processed at the KMA Headquarters Office. Progress reports are secured on students in medical school, and contact is maintained with interns, recipients in the armed services, and past recipients in practice. The Louisville Trust Company serves as Fiscal Agent for the Fund.

Loans are available to residents of Kentucky who have been admitted to an accredited medical school, and who will agree to practice in rural Kentucky one year for each loan received.

Currently, the Fund will lend $2,500 to applicants who will agree to practice in counties listed as "critically in need of physicians" or in the Kentucky Public Health Service in an approved area. One year's loan is waived for each year of practice. Approximately one-half of the loans processed this year are for recipients who have agreed to practice in a "critical county."

Regular loans were increased from $1,500 to $2,000 this year. These loans bear an interest rate of two per cent to maturity and permit practice in over 100 rural counties in the state. Should a student later decide to practice in any of the ten designated "critical" counties or 11 "semi-critical" areas, forgiveness features will apply.

The ten "critical" counties approved by the Board, on the basis of information supplied in May by the Kentucky Medical Association and the State Board of Health, are: Breathitt, Butler, Carter, Crittenden, Jackson, Knott, Lee, Lewis, Meade and Rockcastle. Semi-critical areas selected are: Bracken-Robertson-Fleming, Edmonson, Henry, Larue, Lincoln, Menifee-Powell-Estill, McCreary, Owen-Gallatin, Owsley, Union and Wolfe.

The Fund has also provided for a $2,000 Establish Practice Loan as an assistance to physicians who will agree to establish practice in a "critical" or "semi-critical" county. The Fund will forgive $1,000 of this amount for each year of practice in a "critical" county, and one-half of this amount for each year of practice in a "semi-critical" area.

The Trustees have elected Peter P. Bosomworth, M.D., Vice-President of the University of Kentucky College of Medicine; Charles E. Terry, M.D., Irvine, Kentucky; Mark A. Judge, M.D., Louisville, Kentucky; Ernest O. Beal, Ph.D., Western Kentucky

University, Bowling Green, Kentucky; Elmer G. Prewitt, M.D., Corbin, Kentucky; Pierce Lively, Attorney, Danville, Kentucky; Hayden Timmons, Director of Public Relations, Kentucky Rural Electric Cooperative Corporation, Louisville, Kentucky; and Mr. John Koon, Executive Secretary, Kentucky Farm Bureau, as new Board members. Doctors Terry, Judge and Prewitt were recipients of the Fund.

The Board of Trustees is especially appreciative of the continued interest and support of Governor Louie B. Nunn, Health Commissioner William P. McElwain, M.D., and the Kentucky General Assembly.

G. L. Simpson, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee reviewed the Report of the Rural Kentucky Medical Scholarship Fund Board of Trustees, and heard additional explanation on the function of the Scholarship Fund by its Chairman, G. L. Simpson, M.D.

The applicants for scholarships in 1971 were designated as the "C. C. Howard, M.D., Silver Anniversary Class," in honor of the late Chairman of the Fund, C. C. Howard, M.D. Doctor Howard submitted his resignation after 25 years of leadership to one of the nation's pioneer scholarship funds for medical students.

The Fund now has 167 physicians in practice in 86 Kentucky counties, with 15 serving in "critical" counties.

Regular loans were increased from $1,500 to $2,000 this year. The Fund will lend $2,500 to applicants who will agree to practice in counties listed as "critically in need of physicians" or in the Kentucky Public Health Service in an approved area.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

Following some discussion of this report, a motion was made seconded and passed to add an amendment to the report as follows: "Since family practice has become a specialty requiring three years of postgraduate training, the Board of Trustees of the Kentucky Medical Association study and make recommendations concerning the future direction to be taken by the Rural Kentucky Medical Scholarship Fund." The original motion as amended was adopted.

Report of the Committee on Medical Economics

The new KMA Committee on Medical Economics has held two meetings, on January 7 and April 8, 1971. In keeping with the suggestion of the KMA Executive Committee, it was agreed that a study of foundations for medical care should have first priority during this Associational year.

In addition to the meetings of the Committee, individual members of the Committee have attended special meetings sponsored by the Jefferson County Medical Society and have heard discussions on the foundation concept as represented by the California foundations and by that of Hennepin County, Minnesota. The Chairman and the Executive Director of the Association attended the AMA Socio-Economic Congress, at which one full day was devoted to foundations. The Chairman of the KMA Board of Trustees, physicians representing the Campbell-Kenton, Fayette, and Jefferson County Medical Societies, and a staff member of the KMA attended a two-day Regional Conference on Foundations for Medical Care, which was held in Des Moines, Iowa, on May 7-9.

After careful study and thorough discussion, the Chairman of the Committee on Medical Economics, at the April 14 meeting of the KMA Board of Trustees, held during the KMA Interim Meeting, presented recommendations unanimously approved by his Committee members. They were:

1. That KMA form a Kentucky Foundation for Medical Care as a separate, non-profit, tax-exempt corporation, but with an inter-locking directorate to assure that it would remain under the control of KMA.

a. That the initial efforts of the Foundation should be in the area of peer review, not only of fees, but, more importantly, in the area of quality medical care through the development of norms or standards of medical care in Kentucky and through the careful scrutiny of possible over- and under-utilization.

b. The Foundation should develop minimum standcitizens of this Commonwealth, and use its influence and good offices to see that sub-standard coverage is upgraded or removed from the market.

c. The Foundation should give advice and encouragement in the development of methods of improving the quality of health care and the better distribution of such care to all citizens, and should work with other allied and interested groups in the area of improvements in the means of financing and providing health care.

d. The Foundation should have such freedom of action and purpose as to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain the medical profession's position of leadership in health matters in Kentucky in keeping with current developments in the legislative, social or medical fields.

2. That the initial Board of Directors of the Foundation be made up of the KMA President, President-Elect, Immediate Past-President, and the Chairman of the KMA Board and five other Trustees, the Chairman and four other members of the KMA Claims and Utilization Review Committee, and the Executive Director of the Association. The terms of office and the election of future Directors should be provided for in the bylaws of the Foundation.

3. That the Board of Directors should have available for its benefit an Advisory Council made up of representatives of business, industry, commercial and pre-paid health insurance, labor and allied providers of health care. Consideration must be given to the advisability, at a later date, of placing such representatives on the Board as voting members.

4. That the Foundation should be authorized to accept funds from business, industry, the commercial

and pre-paid health insurance companies, government agencies or other foundations, should they be offered, in an effort to accomplish the aims and purposes of the Foundation.

5. That provision should be made for such staff personnel as may be necessary to implement these recommendations and to carry on the functions and purposes of the Foundation.

6. That the Association transfer to the Foundation those committees and services whose activities and interest fall within the purview of the Foundation's aims and purposes. These would include the Claims and Utilization Review Committee, activities in Comprehensive Health Planning, and Physicians Placement Services, and, possibly, the Postgraduate Medical Education Fund. The Foundation, too, should assist the Rural Kentucky Medical Scholarship Fund.

It was a pleasure to note that the Board of Trustees, in adopting the report of the Committee on Medical Economics made during the Interim Meeting, requested that it be forwarded to the House of Delegates with a recommendation for approval and asked the Committee to investigate further steps to achieve incorporation of the Foundation as a non-profit, tax-exempt corporation, including the preparation of bylaws. Its adoption is urged.

The material outlined below summarizes the information available on such foundations, the reasons why we feel that KMA should form a foundation, and a few of the specific purposes for which our foundation should initially be designed.

This material is being presented for the information of the membership and the guidance of the delegates.

What Is a Foundation?

A Foundation for Medical Care is an organization of physicians sponsored by a medical society or association. It is a separate and autonomous non-profit, tax-exempt corporation with its own Board of Directors. Members of the medical association may apply for annual membership in the medical care foundation, and upon being accepted, may participate in all programs and activities so long as they abide by the bylaws, rules, and regulations of the Foundation.

A Foundation for Medical Care is concerned with the development and delivery of medical services and the reasonable cost of health care, whether publicly or privately financed. It espouses the concept of free choice of physician and hospital by the patient and the fee-for-service principle.

A Foundation establishes standards for health care based on patterns, or norms, in the area. Through peer review, it preserves and enhances the quality of medical care, guarding against both over-utilization and under-utilization of medical services in and/or out of the hospital.

The Foundation for Medical Care provides a mechanism through which physicians may adequately deal with public and private organizations that provide financing for health care services.

Why Do We Need a Foundation?

There are at least 12 proposals before Congress at the present time which deal with the provision and financing of health care. Although it seems certain that no one of these bills will become law this year, and possibly not next year, it is inevitable that Congress will, sooner or later, vote on a measure for national health insurance—probably one that includes specific features of several different bills already introduced.

The one thing that most all of these bills have in common is the demand for cost and quality control of health care services through peer review.

True "peer" review requires that the work of physicians be reviewed by other physicians, not by bureaucratically appointed representatives of labor, business, government, or the public, who have no qualifications for this task. KMA has an effective peer review mechanism and is, in fact, ahead of most of its sister state organizations in this area. In reality, however, we have only scratched the surface in this relatively new concept.

Regional or district peer review committees must be established across the state, and their members trained in the methods of operation; norms, or standards, of medical care in Kentucky must be established in order that the various committees may be consistent in the review of cases brought to their attention; hospital utilization review must be encouraged and stimulated to reach its peak of effectiveness; it must be convincingly demonstrated to the physicians of Kentucky that peer review is not a punitive mechanism, but, rather, an educational program which will "pin-point" the physician who has not "kept up," who is not practicing good quality medicine, pointing out to him his failings, and encouraging him to take the necessary remedial steps.

To establish and conduct a program such as this requires funds—money that is not available in KMA's budget. Based on the experience of states which have already established foundations, and there are at least 12 of them at this time, money which is not available to a medical association is easily accessible to a foundation—from business, industry, other foundations, HEW, Comprehensive Health Planning, and other agencies.

There are strong indications, furthermore, that medical associations themselves would not be authorized to perform this review function, but that a separate organization (foundation) sponsored by a state association could be given this responsibility.

The demand for experimentation in alternate systems of health care delivery is present and growing stronger every day. The physicians in Kentucky need to keep abreast of these developments, advise and consult with those who promote them, and to make sure that their voice is heard so that they may maintain some control over their own destiny. The foundation concept will permit the physician to continue an active private practice for most of his patients while, at the same time, participating in a pre-paid group coverage program for a segment of the population. We must be in a position to make certain that Health Maintenance Organizations and other

experimental programs, do not become financially top-heavy with administrative overhead at the expense of funds allotted for health services. We must guard against those organizational patterns which suggest non-medical control over medical services.

These things an individual physician cannot do for himself. Nor can his medical association legally become involved in many of these areas. A foundation can do these things for him.

For many years KMA has devoted much of its efforts toward improving the health care of the citizens of this Commonwealth. These efforts have been scattered through the Placement Service, Postgraduate Medical Education, Comprehensive Health Planning, Regional Medical Program liaison, and, more recently, through the Claims and Utilization Review Committee. The Rural Kentucky Medical Scholarship Fund was authorized by the Legislature and funded by the State, but is administered by KMA. All of these programs could be brought under the umbrella of the Foundation with increased coordination and effectiveness.

Health insurance polices sold in this State, in many instances, offer substandard coverage. Physicians should be interested in seeing that this situation is corrected. A foundation should develop minimum standards of coverage for health insurance and use its influence and good offices to see that substandard policies are up-graded or removed from he market.

Who Would Be Members of the Foundation?

Any member of KMA in good standing could apply for membership and, upon acceptance by the Board of Directors, become a member. Membership would be for one year and be renewable by the member, with the approval of the Board. Membership would be voluntary.

Who Would Manage the Foundation?

The Foundation would be managed by a Board of Directors elected in accordance with the bylaws. The Board would be authorized to engage the services of such administrative and secretarial personnel as may be necessary to effectively conduct the affairs of the Foundation.

How Would the Foundation Be Financed?

It is anticipated that membership dues will not be required.

Organizational and development funds should be available from HEW and other governmental agencies. It is expected that industry and the commercial and pre-paid health insurance will contribute to this program on the basis that they have much to gain by the efforts of the Foundation to control health care costs.

Additional funds will be generated from fees paid by third-party carriers who utilize the peer review mechanism.

What Other States Have Foundations?

Georgia, Florida, Illinois, Iowa, Mississippi, Missouri, Colorado, Hawaii, Wyoming, Pennsylvania and Delaware have already formed foundations. Many county medical societies have also developed foundations, including Denver, Minneapolis and about 17 counties in California—some of which are more than 15 years old. From information available at this time, it would appear that at least 40 state associations will have established foundations within the next year. The AMA House of Delegates strongly endorsed the foundation concept at its recent meeting in Atlantic City.

Do All Foundations Function in the Same Manner?

No. The beauty of the foundation concept is that it can be set up to accomplish whatever purpose its members direct.

Some foundations are designed to contract with the state government to administer programs, including the processing of claims and writing of checks. Others have entered contracts to set up prepaid group health organizations.

The primary purpose envisioned for our Foundation is comprehensive and effective peer review so as to insure quality medical care at a reasonable cost.

The Foundation should, however, have such freedom of action and purpose as to allow it, within all legal bounds, to engage in such activities as may be necessary to maintain our position of leadership in health matters in Kentucky in keeping with current developments in the legislative, social or medical fields.

This report on foundations will be presented to the KMA membership, through an article in *The KMA Journal*, and by a special mailing to all county medical society secretaries, KMA officers, trustees, and members of the House of Delegates. Copies of the proposed articles of incorporation and bylaws, which are being prepared by the KMA legal counsel, will serve as an addendum to this report and will appear in the delegates Annual Meeting reports booklet.

Henry B. Asman, M.D., Chairman

Addendum to the Report on Medical Economics

Since the foregoing report was drafted, your Committee has conferred with legal counsel and on his advice has voted to recommend to you that instead of having individual members apply annually for membership in the Foundation and then have that group elect the directors (Trustees) of the Foundation, we broaden the electorate to include the entire membership of the KMA and at the same time simplify the electoral mechanics.

The Board of Trustees of the KMA is, of course, elected by the entire membership through the House of Delegates. It was therefore felt that the plan adopted in Florida whereby the Board of Trustees of the state society constitute the entire membership of the Foundation, would be well adapted to our situation here in Kentucky.

By having the KMA Board of Trustees elect the Board of Trustees of the Foundation, the entire membership of KMA is represented and at the same time the possibility of a divergence in policy and direction is avoided.

We therefore recommend that the attached Articles of Incorporation and Bylaws be approved and that the appropriate officers be authorized to cause the Kentucky Foundation for Medical Care, Inc. to be incorporated.

Bylaws of Kentucky Foundation for Medical Care, Inc.

Chapter 1. **General Provisions.** The corporation shall conduct and carry on its business without profit to itself or its members, or any class thereof. No member of this corporation shall, by reason of membership herein, be or become entitled at any time to receive any assets, property, income, or earnings from the corporation, or to profit therefrom in any manner.

All of the income, revenue, and earnings of the corporation shall be held, used, managed, devoted, expended and applied in the discretion and judgment of the Board of Trustees, to carry out the objects and purposes of the corporation, without profit, direct or indirect, to any member of the corporation as such.

Nothing contained herein shall prohibit the payment of reasonable compensation by the corporation to any member thereof for services rendered.

Chapter 2. **Meetings of Membership.** The annual meeting of the membership shall be held on the date and at the hour of the last (reorganization) meeting of the Board of Trustees of the Kentucky Medical Association held in conjunction with the Annual Meeting of said Association. Notice of that meeting shall constitute notice of the annual meeting of the membership of this corporation and no further notice shall be required.

Special meetings of the membership of this corporation may be called by the President at any time, upon ten days' written notice unless such notice is waived by all members. Special meetings shall be called by the Secretary upon not less than ten days' written notice (unless waived as aforesaid) at the request of a majority of the membership.

Special meetings of the membership may be held anywhere in Jefferson County, Kentucky.

Chapter 3. **Duties of Officers.** The President of the corporation shall preside at all meetings of the membership and all meetings of the Board of Trustees and shall be the chief executive of the corporation. He shall perform such other duties as may, from time to time, be imposed upon him by the Board of Trustees.

The Vice-President (or First Vice-President, if more than one Vice-President is elected by the Board of Trustees) shall preside at meetings of the membership or meetings of the Board of Trustees from which the President is absent and shall perform such other duties as may, from time to time, be imposed upon him by the Board of Trustees. The other Vice-Presidents, if any, shall perform such duties as may be specified by the Board.

The Secretary of the corporation shall be the custodian of all of its records. He shall keep accurate minutes of all meetings of the membership and meetings of the Board of Trustees and shall perform such other duties as may be imposed upon him by the Board.

The Treasurer shall receive, disburse, and account for all of the funds of the corporation under the direction of the Board of Trustees. He shall perform such other duties as may, from time to time, be imposed upon him by the Board, and his books of account shall be audited at least annually.

Chapter 4. **Board of Trustees.** The Board of Trustees of the corporation shall consist of five (5) ex officio members and ten (10) elected members. The five ex officio members shall be: the President, President-Elect, Immediate Past-President, Chairman of the Board and Executive Director of the Kentucky Medical Association. The elected members of the Board of Trustees shall consist of five Trustees of the Kentucky Medical Association and five members of the Kentucky Medical Association at large.

The terms of office of ex officio members of the Board of Trustees shall coincide with their terms of office in the Kentucky Medical Association. Two of the five members elected from among the Trustees of the Kentucky Medical Association shall be elected for terms of three years; two shall be elected for terms of two years; and one shall be elected for a term of one year. In like manner, two of the five members elected from among the membership of the Kentucky Medical Association (at large) shall be elected for terms of three years; two shall be elected for terms of two years; and one shall be elected for a term of one year. Their successors shall each be elected for terms of three years.

No elected member of the Board shall be eligible to serve more than two consecutive terms, except that a member elected to fill a vacancy may be elected to two consecutive terms thereafter.

The Board shall meet on call of the President and at such other times and places as it may, by resolution, fix.

Chapter 5. **Advisory Council.** The Board of Trustees shall have power to appoint an Advisory Council made up of representatives of business, industry, commercial and prepaid health insurance, labor and allied providers of health care, and such other segments of the public as may be desired, the function of which shall be to advise the Board on such matters as may be submitted to the Council by the Board. The precise composition of the Advisory Council, the terms of office of its members and the rules by which its proceedings shall be governed, shall be as prescribed by appropriate resolution of the Board of Trustees.

Chapter 6. The Board of Trustees shall have authority to employ a director and such other agents and employees as may be necessary to carry out the objects of the corporation, and to fix their duties and compensation, including, without limitation, one or more fiscal agents to handle the investment of trust funds or other funds in excess of the

corporation's need for working capital. It shall also have power to appoint committees from among the membership of the Kentucky Medical Association, to perform such functions as may be assigned to them.

Chapter 7. **Amendments.** These bylaws may be altered or amended at any time, upon the vote of a majority of the membership at any regular or special meeting thereof.

Certificate of Adoption

I, _____, Secretary of Kentucky Foundation for Medical Care, Inc., do hereby certify that the foregoing bylaws were adopted by the vote of a majority of the membership of said corporation at a meeting held on the _____ day of September, 1971.

WITNESS MY HAND this _____ day of _____, 1971.

Articles of Incorporation of Kentucky Foundation for Medical Care, Inc.

We, the undersigned, in order to organize, form and create a non-stock, tax-exempt, charitable corporation under and pursuant to the provisions of Sections 273.161 to 273.390 of the Kentucky Revised Statutes, do this 5th day of August, 1971, certify the following, to wit:

Article 1. The name of the corporation shall be: Kentucky Foundation for Medical Care, Inc.

Article 2. The principal office and mailing address of the corporation shall, until changed by the Board of Trustees, be: 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Article 3. The name and address of its resident agent for service of process shall be: Robert G. Cox, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Article 4. The duration of the corporation shall be perpetual.

Article 5. The purposes of the corporation shall be:

A. To advance the art of medicine at all levels;

B. To promote the education and training of added numbers of physicians, nurses and other paramedical personnel qualified to minister to the health needs of a growing population;

C. To devise and encourage the use of improved methods of delivery of high quality medical care;

D. To develop minimum standards of coverage for health insurance and to publicize the same with a view towards removing substandard coverage from the market;

E. To develop, organize and operate peer review mechanisms providing objectivity in evaluating the quality of medical care delivered under comprehensive health care programs, the cost thereof and the degree of efficiency by which the program meets the health needs of the population, establishing criteria tending to assure the public of optimum utilization of the available health manpower and facilities and relieving the government of the burden of such review functions;

F. To encourage and coordinate involvement by health professions in comprehensive health planning and area medical program activities;

G. To administer, directly or indirectly, health care programs;

H. To foster freedom of choice among physicians and their patients, freedom from third-party interference with the physician-patient relationship and freedom from third-party interference with the fee-for-service arrangement upon which the physician-patient relationship is based, and

I. To disseminate information to, and educate, the health professions and the general public with respect to the foregoing objectives.

Article 6. No part of the net earnings of the corporation shall inure to the private pecuniary profit or gain of any member, provided, however, that the corporation may compensate a member for services rendered; no substantial part of the activities of the corporation shall be to carry on propaganda or influence legislation or participate in or intervene in (including the publishing or distributing of statements) any political campaign on behalf of any candidate for public office; and in the event of liquidation, all assets of the corporation shall be distributed to one or more charitable organizations (within the meaning of Section 501(c)(3), Internal Revenue Code of 1954) to be selected by the Board of Trustees.

Article 7. The powers of the corporation shall be to do all manner of things permissible under the laws of this Commonwealth in the furtherance of the purposes stated in Article 5 hereof.

Article 8. The corporation shall be governed by a board of directors which shall be known as the Board of Trustees, composed of not less than five (5) nor more than twenty (20) members, to be elected annually by the membership. The first Board of Trustees shall be composed of the incorporators, who shall serve until the first meeting of the membership at which a Board shall be elected, and the annual election of Trustees shall be held on the anniversary of that date, unless otherwise provided in the bylaws.

The Board shall elect, from its membership, a President, a Secretary, a Treasurer, and as many Vice-Presidents as may be desired. Provided, however, that the offices of Secretary and Treasurer may be held by one person.

Officers shall be elected for terms of one year and until their successors are elected and qualify. Trustees may be elected for terms of one, two or three years, and shall serve until their successors are elected and qualify.

At all meetings of the Board of Trustees, a quorum shall consist of a majority of the full membership of the Board.

Article 9. The members of the Board of Trustees of the Kentucky Medical Association, as from time to time constituted, and the Executive Director of said Association, shall comprise the entire membership of the corporation. Any person who ceases to hold such office shall cease to be a member of this corporation.

At all meetings of the membership, a majority of the total membership shall constitute a quorum.

IN WITNESS WHEREOF, we have hereunto affixed our signatures, the day and date first hereinabove mentioned.

Acknowledgement

State of Kentucky

County of Jefferson

I, _____, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing Articles of Incorporation of Kentucky Foundation for Medical Care, Inc. were produced to me by _____, all known to me personally, who acknowledged that they executed the same for the purposes stated therein.

This _____ day of September, 1971.

Notary Public

My commission expires _____

THIS INSTRUMENT DRAFTED BY:
E. GAINES DAVIS, JR.
ATTORNEY AT LAW
P. O. BOX 457
FRANKFORT, KY.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 reviewed the rather lengthy and comprehensive Report of the Committee on Medical Economics, and a rather complete discussion of this report was given to the Reference Committee and to the members who attended this meeting.

On April 14, 1971, the Committee on Medical Economics recommended to the KMA Board of Trustees that KMA form a Kentucky Foundation for Medical Care as a separate, non-profit, tax-exempt corporation, but with an interlocking directorate to assure that it would remain under the control of KMA.

The Board of Trustees approved the report and instructed the Committee to continue its study and to provide the membership with the reasoning for a KMA Foundation prior to the Board submitting its final recommendation to the House of Delegates.

The Committee on Medical Economics has drawn up a set of bylaws for the Kentucky Foundation for Medical Care and there are listed on pages 36, 37, and 38 of the book of reports to the House of Delegates.

In a discussion held before this Reference Committee, it was pointed out that the primary purpose envisioned for our Foundation is comprehensive and effective "peer" review, so as to insure quality medical care at a reasonable cost. The Foundation should, however, have such freedom of action and purpose as to allow it to engage in such activities as may be necessary to maintain our position of leadership in health matters in Kentucky in keeping with current developments in the legislative, social, or medical fields.

In the discussion before the Reference Committee, there were expressed fears concerning the possibility that there would, of necessity, be created some types of organizations which would tend to exert types of "peer" review. It was the apparent concensus of feeling that it is imperative that organized medicine must either develop such mechanisms or be forced to accept less satisfactory mechanisms developed by governmental bodies.

For these reasons, the Reference Committee recognizes the need for Foundations and approves the recommendations of the Committee on Medical Economics including the bylaws, which the Committee has submitted. In the event that this is approved by the House of Delegates, the Reference Committee also recommends approval of the Articles of Incorporation which have been submitted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded.)

Doctor Asman and Mr. Davis responded to questions of the House members pertaining to the proposed Kentucky Foundation for Medical Care, and following considerable discussion, the motion carried.

Report of the Committee to Study the Constitution and Bylaws

Your Committee to Study the Constitution and Bylaws met this year on June 10 for its annual session to implement Bylaw changes that had been proposed to the Committee and to generally attempt to update the Bylaws.

Last year, a comprehensive study to modernize the Bylaws was made and the changes recommended by the Committee were approved by the House of Delegates.

We hope that it is some help to you in interpreting our report for us to use the following format. First, we will present our recommendations and reasons for submitting any proposed changes. Secondly, we will quote the wording of the present section of the Constitution and Bylaws and thirdly, present the proposed amendment to the Constitution and Bylaws.

There is one area of the Constitution which is to be noted. Last year the Board of Trustees recommended that KMA dues be increased from $80 to $130 per year and that there be no difference between the amount of dues for all active members of the Association, with the exception that new members would pay only $80 dues per year during their first three years of active membership.

This recommendation required a change in Article

IX of the Constitution, since we would not have an "equal per capita assessment by class of membership" and the phrase relating to "equal per capita" was deleted.

Article XII dictates that any change in the Constitution lay over one year and be brought to the House a second time for ratification. In addition, the proposed change must be sent officially to each component county society at least two months before the session at which final action is to be taken. Inadvertently, this change, although passed last year, was printed prematurely in the 1970 issue of the Constitution and Bylaws. In accordance with Article XII of the Constitution, this amendment is presented for ratification.

Article IX, Funds and Expenses

Present Article: The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select, including but not limited to an equal per capita assesment by class of membership, upon each component county society. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications and for such other purposes as will promote the welfare of the Association and the profession.

Proposed Article: The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications and for such other purposes as will promote the welfare of the Association and the profession.

Amendments To The Bylaws

RECOMMENDATION

The KMA Executive Committee has recommended that Alternate Trustees be made voting members of the House. It is the feeling of the Committee that the Association should utilize the talents and knowledge of the Alternate Trustees and recommends that the caption of Chapter V of the Bylaws be changed in order to point up the fact that Trustees and their alternates are officers of the Association and as such are voting members of the House.

Chapter V, Duties of Officers

Present Caption, Chapter V: Duties of Officers

Proposed Caption, Chapter V: Duties of Officers Other Than Trustees and Alternates.

RECOMMENDATION

It was pointed out that the practice of having each member of a component society enter his name in the registration book at Annual Meetings and special meetings of the Association is no longer carried out. The Committee recommends that the first sentence of Chapter II, Section 4, be amended for modernization in this section of the Bylaws.

Present Section 4: Each member in attendance at any meeting shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

Proposed Section 4: Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

Robert L. McClendon, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee reviewed the Report of the Committee to Study the Constitution and Bylaws.

At the 1970 meeting of the House of Delegates, the Board of Trustees recommended that there be no difference between the amount of dues for all active members of the Association, with the exception that new members would pay only $80 dues per year during their first three years of active membership.

This recommendation required a change in Article IX of the Constitution, deleting from Article IX "equal per capita." Such change should have laid over for one year and been brought to the House of Delegates the second time for ratification. Inadvertently, this change, although passed last year, was printed prematurely in order to meet the requirements of Article XII. The above change is now submitted for ratification.

Article IX, Funds and Expenses, states: "The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select, including, but not limited to, an equal per capita assessment by class of membership, upon each component society. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

The Constitution and Bylaws Committee has proposed the following Article to replace the present one:

"The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession."

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Amendments To The Bylaws

RECOMMENDATION

"The KMA Executive Committee has recommended that Alternate Trustees be made voting members of the House. It is the feeling of the Committee that the Association should utilize the talents and knowledge of the Alternate Trustees and recommends that the caption of Chapter V of the Bylaws be changed in order to point up the fact that Trustees and their alternates are officers of the Association and as such are voting members of the House.

CHAPTER V, Duties of Officers

Present Caption, CHAPTER V, Duties of Officers
Proposed Caption, CHAPTER V, Duties of Officers Other Than Trustees and Alternates

RECOMMENDATION

It was pointed out that the practice of having each member of a component society enter his name in the registration book at Annual Meetings and special meetings of the Association is no longer carried out. The committee recommends that the first sentence of Chapter II, Section 4, be amended for modernization in this section of the Bylaws.

Present Section 4: Each member in attendance at any meeting shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has compiled with the provisions of this section.

Proposed Section 4: Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section."

Mr. Speaker, I move the adoption of this section of Report No. 27.

(Motion was seconded and carried.)

Mr. Speaker, I move the adoption of Report No. 27 as a whole.

(Motion was seconded and carried.)

Report of the Interim Meeting Program Committee

The Interim Meeting Committee met last November to plan our program for the 1971 Interim Meeting. Our session was held at the Cave City Holiday Inn, site of the Interim Meeting, so that we could review the facilities and make definitive plans.

After discussing the program of previous Interim Meetings, the Committee members were enthusiastic to present a new format as had been requested by the Executive Committee. The new format called for a morning session, free afternoon, dinner session and a closing program the following morning.

Details of these three sessions were finalized and coordinated with related meetings held in conjunction with the Interim Meeting. The theme "Serving the Physician, the Profession, the Public" was adopted and speakers were selected. We were pleased to have had excellent and authoritative speakers from as far away as California and such distinguished program participants as Tim Lee Carter, M.D., Kentucky's Fifth District Representative in the United States Congress.

We felt our subjects to be timely, our speakers knowledgeable and persuasive and our audience attentive and appreciative. We are grateful to all of you who attended and urge the members of this Association to make plans now to attend next year's meeting, April 13-14, at Somerset during KEA.

Your Committee members feel that the importance of the Interim Meeting increases every year. Medicine has more and more socio-economic matters with which to tend each passing day, and the Interim Meeting is our main source for dissemination and exchange of thoughts on such significant activities.

Penultimately, your Committee wishes to recommend to you the continuance of the Interim Meeting for 1972 with the same format as that utilized in 1971, mainly a general session on Thursday morning, April 13, a free afternoon and an evening session with the meeting closing at noon on Friday, April 14. The Board of Trustees would meet on Wednesday preceding the Thursday general sessions. This format, allowing registrants some free time, resulted in excellent attendance in the meetings when the program was in progress.

In closing our report, we wish to express appreciation to the Woman's Auxiliary and to the medical societies of Butler, Edmonson and Warren Counties for their cooperative efforts in assuring a successful program.

John C. Quertermous, M.D., Chairman

Recommendations, Reference Committee No. 6

The Report of the Interim Meeting Program Committee was discussed. The Reference Committee would like to comment that from all reports the Interim Meeting was most successful, and wishes to commend the Interim Meeting Committee for its work in making the meeting so successful. The Reference Committee was greatly impressed by the choice of words of the Chairman of the Committee; namely, "penultimately," and wishes to congratulate Doctor Quertermous as a disciple of Mr. William Buckley.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the McDowell House Board of Managers

Each year the Board of Managers of the McDowell House meets quarterly in the House in Danville to examine the House and its furnishings, to consider the necessity for various repairs and to continue the administrative duties to maintain the House for the purposes of inspection and study by the public. At each meeting the vast majority of the members are in attendance and maintain their complete interest. The non-medical members of this Board add greatly to the public value of this property.

During the year, Mr. Charles Wood of the Brown Foundation, has reviewed the standing of the McDowell Memorial Fund and with additional approval by the Internal Revenue Service has concluded that this Fund is a public endowment fund in contrast to a private fund and that all contributions to it are completely tax deductible. It is hoped that the bequests and gifts to this fund through the years to come will make the future of the House secure for the valuable, historical contents which it contains.

Throughout the years, various county auxiliaries of the Medical Association have contributed funds and personal interest and efforts to the improvements and maintenance of the McDowell House. This includes the refurnishing and refurbishing of the House and restoration of certain portraits in the House.

During the year, various medical associations have made contributions to the maintenance of the House. In addition, the Corning Glass Works Foundation has made a contribution.

The members of the McDowell House Board of Managers are:

Laman A. Gray, M.D., Louisville, Chairman
Robert C. Bateman, M.D., Danville
B. B. Baughman, M.D., Frankfort
C. Melvin Bernhard, M.D., Louisville
Mr. James L. Cogar, Harrodsburg
Mr. Sterling Coke, Lexington
Eugene H. Conner, M.D., Louisville
Mr. George Grider, Danville
Blaine Lewis, M.D., Louisville
M. David Orrahood, M.D., Owensboro
Richard H. Segnitz, M.D., Lexington
Dr. Earl P. Slone, Lexington
Mr. Enos Swain, Danville

Laman A. Gray, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee reviewed the Report of the McDowell House Board of Managers.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Memorials Commission

The Memorials Commission met once this Associational year on Thursday, July 15, 1971.

The Commission has been fortunate in the acquisition of a collection of books from Mr. Dudley Weatherby, of Louisville, and books and journals from the collection of the late Mrs. Arthur T. McCormick, of Louisville. We are pleased to acknowledge receipt of the *History of Medicine in Campbell-Kenton County* and extend congratulations to the author.

This year, the KMA meeting memorializes our President for the year 1891, George Beeler, M.D., (1830-1899) of Clinton, Kentucky.

Eugene H. Conner, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee reviewed the Report of the Memorials Commission.

The Commission was pleased to acknowledge receipt of the *History of Medicine in Campbell-Kenton County*, and extended congratulations to the authors for a work well done.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Committee on Plans and Development

In this its third year of existence, the Plans and Development Committee held two meetings and crystalized plans for future activities.

In reviewing actions of this year which were recommended by our Committee last year, we note:

1. The Committee on Medical Economics has been appointed and made numerous valuable contributions to the Association in its first year of activity.

2. The Public Relations Committee has been organized; and it, along with the PR Consultant, has been hard at work.

3. Professional liability insurance has received priority consideration, and information has been made available to the members through *The KMA Journal*, district meetings and an hour-long panel of experts during the 1971 Interim Meeting.

4. The Interspecialty Council has been appointed and has held meetings to create closer ties among the specialty groups and between the specialty groups and KMA.

At our January session this year, we primarily discussed "health care delivery systems," highlighting our comments on today's popular subjects of prepayment mechanisms, peer review, foundations, group practice and health maintenance organizations. There are already HMO-type organizations being established in Kentucky, and we mainly had an informational meeting to discuss some of the activities in Louisville, Lexington, Eastern Kentucky and Western Kentucky. Peer review was discussed in some detail, and we encouraged the acceptance of the Comprehensive Health Planning grant we now have for our peer review program.

Finally, at our first meeting, we made the following four specific recommendations to the Board which

were accepted and are presented to you for your information:

1. That state legislatures be urged to amend state medical practice acts to remove any barriers to increased delegation of tasks to allied health personnel by physicians.

2. That increased study be given to the feasibility of establishing educational equivalency measures and job performance tests as alternative routes to advanced educational placement, licensure or certification of health personnel.

3. That encouragement be given to programs for periodically updating the knowledge and skills of currently licensed or certified occupations, utilizing such methods as continuing education courses, self-assessment tests and review mechanisms.

4. That if KMA pursues its efforts to obtain a separate board of medical licensure, the licensing of allied health personnel be included under that board.

Due to the accelerated pace of plans for action, we devoted our June 3 meeting to a full discussion of alternate methods of health care delivery. We fully recognize that there is no way of proving the best method of delivering health care; and for that reason, we acknowledge that experimentation in new approaches could be helpful. We further agreed that guidelines need to be established to aid in "experimental health care delivery systems," such as health maintenance organizations; and our Committee intends to pursue the formation of these guidelines. It is possible that they will not be prepared by September when the House meets, but wide distribution will be made once they are finalized.

Other items we will soon be pursuing include how to stimulate more physicians to become active on CHP Councils, the feasibility of conducting scientific sessions in conjunction with the Interim Meeting, more study of health care delivery and increased interest in professional liability insurance.

Your Chairman was blessed with an outstanding and dedicated Committee and wishes to express his sincere appreciation to each member. We are especially pleased to, perhaps, be the only Committee with student members; and a special thanks goes to our student representatives from the University of Louisville and University of Kentucky.

Thornton E. Bryan, Jr., M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee on Plans and Development held two meetings during the year. Many of the actions which had been recommended by the Committee last year have been implemented including the appointment of the Committee on Medical Economics, the organization of a Public Relations Committee, and continuation of study relative to a program of professional liability insurance. The Interspecialty Council has been appointed and is active.

Recommendations for this year included: (1) work by the Legislative Committee to secure the amendment of medical practice acts; (2) the development of educational equivalency measures and job performance tests as alternative routes to advanced educational placement, licensure, or certification of health personnel; (3) programs for updating the knowledge and skills of para-medical groups be encouraged; (4) that if a separate board of medical licensure be established, the licensing of allied health personnel be included under that board.

Reference Committee No. 6 commends the Committee on Plans and Development for its significant work.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Matters Pertaining to the KMA Building Addition

During the second meeting of the KMA Board of Trustees for this Associational year, George F. Brockman, M.D., Greenville, Chairman of the Building Committee, reported on his Committee's activities. Authorization was given for the Committee to explore architects that might be used and for representatives of KMA to visit the Mississippi State Medical Association building to discuss plans for KMA's proposed addition. Doctor Brockman also reported, as Chairman of the KMA Advisory to the Woman's Auxiliary, that request for a coordinator, on a part-time basis, had been made by the Auxiliary. The Board recommended that this request be approved ($600 authorized), and that it be considered on a temporary basis to determine whether or not it will be helpful to the work of the Auxiliary and KMA. The trial period will commence March 1, 1971, and cease at the end of this Associational year.

At the third meeting of the Board, George F. Brockman, M.D., Chairman of the KMA Building Committee, informed the Board that Design Environment Group Architects had been selected by the Executive Committee to construct the new proposed addition to the Headquarters Building. Doctor Brockman presented the preliminary plans along with a slide presentation of the proposed additions. Mr. James Gibson, a representative of the architectural firm, was introduced. After considerable discussion, it was the opinion of the Board members that the Board was too large a body to discuss the building proposals; therefore, it was moved and seconded that the entire matter of the building addition be referred back to the Executive Committee with the assistance of the Building Committee to further study the matter and make recommendations to the Board.

The Board of Trustees held their fourth meeting of the Associational year, April 16, 1971, during the Interim Meeting in Cave City.

The Chairman, Lee C. Hess, M.D., reported that the Executive Committee had made further study of the proposed addition to KMA's Headquarters Office and had recommended that the architect draw up plans for the new addition in three stages.

The basic plan which would include the excavation area and the office space being proposed; the second stage would be made up of the conference area proposed; and the final stage would consist of the shell portion of the second floor of the office section.

The Board agreed that no further action would be taken on the proposed addition until after a trip by the Building Committee, staff, and architect to Mississippi to study their Headquarters Building. It was suggested that the auditor present a cost estimate of the project over a ten-year period for consideration in finalizing a decision. After considerable discussion, the Board moved that the Executive Committee and Building Committee be given the responsibility of forming a definite recommendation to be presented to the Board of Trustees.

A most important item considered during the fifth meeting was the recommendation of the Building Committee relating to the addition to the Headquarters Office. A proposal of the Building Committee, endorsed by the Quick Action Committee and the Executive Committee, was approved by the Board, authorizing the construction of a wing consisting of a basement and first and second floor office space. To be added to the building to meet immediate and near future needs, construction is expected to be under way by the time this report reaches you.

Report of the Chairman, Board of Trustees, KMA Building Committee Report

1. The KMA Building Committee has done a monumental job since their appointment last September.

As of the August 5, 1971, Board Meeting, they had held eight Committee meetings during the Associational year. During this one-year span, they interviewed and selected architects, planned the expansion program, visited other state medical society buildings, maintained constant communication with the architects and the Quick Action Committee as plans progressed and cleared all decisions with the Board of Trustees and Executive Committee.

I know you can appreciate the amount of time and effort required of these gentlemen as they worked in our behalf to assure us of a needed addition to our building at the lowest possible cost. By the time you read this report, they will obviously have had to conduct more meetings; and, in fact, ground may be broken for the addition. On behalf of our entire membership, I want to express a lasting appreciation to Lewis Bosworth, M.D., Lexington; Hoyt Gardner, M.D., Louisville; and George F. Brockman, M.D., Greenville, Chairman.

Recommendations, Reference Committee No. 6

The Committee considered the Report of the Chairman, Board of Trustees, Building Addition matters—last paragraph, page 9; paragraph 13, page 10; paragraphs 7, 8, 9 and 13, page 11; and the Building Committee Report only. The Chairman of the Building Committee reported to Reference Committee No. 6 concerning the present status of the new construction at the KMA Headquarters Office. As of August 5, 1971, the Building Committee had held eight meetings during the Associational year, had interviewed and selected architects, planned the expansion program, visited other state medical society buildings, and had cleared all decisions with the Board of Trustees and Executive Committee.

At the present time, construction has been started on the new addition and it is expected that this will be completed by May, 1972. It was pointed out that the new construction has been necessitated by increased activities of the KMA staff, and that the new building will provide the necessary facilities for future increase in these activities.

The Reference Committee wishes to join the Board of Trustees in expressing deep appreciation to N. Lewis Bosworth, M.D., Hoyt D. Gardner, M.D., and George F. Brockman, M.D., for their very dedicated and efficient performance during the past year.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Chairman, Board of Trustees, Medical Economics Committee Matters

A report on the Medical Economics Committee was given by its Chairman, Henry B. Asman, M.D., at the third meeting of the Board during the 1970-71 Associational year. The Committee recommended that KMA form a Medical Foundation, primarily concerned at first in the field of peer review, but with a broad scope to assure KMA's leadership in health matters. The non-profit tax-exempt corporation could accept outside funds to accomplish its goals. After considerable discussion, the Board approved the report and instructed Doctor Asman's Committee to continue its study and provide the membership with the reasoning for a KMA Foundation, prior to the Board submitting its final recommendation to the House of Delegates.

A very important matter considered at the fifth meeting of the Board was the Report of the Medical Economics Committee and their activity in implementing the Board's request of last April. Information has been widely distributed on the urgent need for KMA to form a Foundation for Medical Care by the action of the House of Delegates this year. The Board whole-heartedly approves this action and requests concurrence of the House of Delegates.

Recommendations, Reference Committee No. 6

The Report of the Chairman, Board of Trustees, Medical Economics Committee matters only, was considered. This report was covered under the Report of the Committee on Medical Economics, and no further comment is necessary at this point.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Advisory Committee to Blue Shield, Portion Relating to Health Maintenance Organizations

Our meeting saw a considerable amount of time devoted to discussion of Health Maintenance Organizations (HMO). The HMO concept is a popular one at the present time, with projects under way or already planned in various sections of Kentucky. Reportedly, one purpose of the HMO is to reduce fragmentation in the delivery of Health Service. However, many groups bearing the general description of an HMO are now being formed which could easily compound the fragmentation which they are designed to eliminate. We now see a considerable number of governmental agencies becoming involved, the most recent being the Regional Medical Programs.

It is the Committee's collective opinion that, with medicine's leadership, Kentucky Blue Shield can be the stabilizing factor in this melange of experimental health care delivery systems. It appears to us that many parties are influencing decisions concerning medical care without being knowledgeable of the intricacies involved in its actual provision. Again, we emphasize the policy established last year that "if experimentation is conducted, approved by the county medical society and KMA, that the Kentucky Blue Shield Plan be requested to work in cooperation with KMA in developing an appropriate prepayment mechanism for such experimentation."

Therefore, in order to help eliminate the possibility of additional fragmentation and duplication, we recommend that Kentucky Physicians Mutual, Inc. (Blue Shield), in cooperation with KMA, meet the necessary requirements so as to qualify with interested groups as a Health Maintenance Organization, and thus be able to offer consumers a choice of delivery systems and help prevent unnecessary duplication of costs.

Recommendations, Reference Committee No. 6

The Committee reviewed the Report of the Advisory Committee to Blue Shield, the portion relative to Health Maintenance Organizations only, which was referred to Reference Committee No. 6.

The Advisory Committee to Blue Shield has recommended that Kentucky Physicians Mutual, Inc., in cooperation with KMA, meet the necessary requirements so as to qualify with interested groups as a Health Maintenance Organization, and thus be able to offer consumers a choice of delivery systems and help prevent unnecessary duplication of costs.

Reference Committee No. 6 concurs in this recommendation of the Advisory Committee to Blue Shield and recommends its adoption.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(Motion was seconded and carried.)

Resolution B

Fayette County Medical Society

WHEREAS, by definition the term "Emeritus Member" is interpreted generally to mean having served with distinction, and

WHEREAS, an inactive member category is generally interpreted to mean individuals who have retired from active practice because of longevity, age, or disability, and

WHEREAS, at the present time the working of the Bylaws of the Kentucky Medical Association is not explicit in the terminology for emeritus membership; therefore, be it

RESOLVED, that Chapter I—Membership, Section 2 (b)—Emeritus Members, of the Kentucky Medical Association Bylaws, be changed to read as follows: "Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws but shall not pay dues or hold office. They shall receive *The Journal* and other publications of the Association."

Recommendations, Reference Committee No. 6

The Committee considered Resolution B, KMA Emeritus Membership, introduced by Fayette County. The Reference Committee agrees with the Fayette County resolution, except that it feels that Emeritus members should be allowed to hold office.

The members of Reference Committee No. 6, therefore, submit an alternate resolution identical with the original, except that the phrase "or hold office" has been deleted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution G

Fayette County Medical Society

WHEREAS, the Rural Kentucky Medical Scholarship Fund has for many years contributed to the financial aid of numerous medical students, and

WHEREAS, through this financial aid, it has aided the health needs of rural communities in Kentucky by requiring recipients of the scholarship fund to repay their obligations by service in needy communities of Kentucky upon completion of the internship, and

WHEREAS, with the formation of the boards for family practice, general practice is now considered a specialty requiring three years of post-internship training, and

WHEREAS, there are numerous communities in Kentucky which require the services of physicians other than a family practitioner; therefore be it

RESOLVED, that the House of Delegates of the Kentucky Medical Association urge the Board of Trustees of the Rural Kentucky Medical Scholarship Fund to allow recipients of the fund to complete postgraduate education in any specialty and become board eligible before requiring them to repay their obligations, and be it further

RESOLVED, that the House of Delegates of the Kentucky Medical Association urge the Board of Trustees of the Rural Kentucky Medical Scholarship Fund to place emphasis on those communities in Kentucky who need the services of not only family physicians, but also other specialists.

Recommendations, Reference Committee No. 6

Resolution G, Rural Kentucky Medical Scholarship Fund, introduced by Fayette County, was discussed.

The Chairman of the Board of Trustees of the Rural Kentucky Medical Scholarship Fund appeared before our Reference Committee and voiced opposition to the resolution. He pointed out that the Board of Trustees of the Fund approves allowing recipients of the Fund to participate in selected residency programs, which must be approved on an individual basis. Since this is already being done by the Board of Trustees of the Scholarship Fund, Reference Committee No. 6 recommends that Resolution G not be approved.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Resolution K

KMA Board of Trustees

WHEREAS, in the Bylaws of the Kentucky Medical Association, Interns and Residents are categorized as associate, non-voting members of the Association, and

WHEREAS, it is felt that Interns and Residents should be afforded the opportunity to vote in their medical societies, now therefore be it

RESOLVED, that the KMA House of Delegates request the Bylaws of the Kentucky Medical Association be changed appropriately to reflect the status of Interns and Residents from non-voting to voting membership.

Recommendations, Reference Committee No. 6

The Committee considered Resolution K, KMA Membership Clarification of Interns and Residents, submitted by the KMA Board of Trustees. While the Reference Committee recognizes the urgency of maintaining our membership level at a sufficient number to qualify for our present quota of AMA delegates, the Committee feels that there are so many problems involved in this action, that action at this time could well be premature. We, therefore, recommend that this matter be referred back to the Board of Trustees for further study.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded.)

Doctor Hess then proposed the following amendment submitted by the Board of Trustees in lieu of Resolution K: "Amend Chapter I, Section 2(c), by striking all references to interns, residents, and teaching fellows, and create a new subsection (to be appropriately renumbered) reading as follows:

"In-Training Members." Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the State Board of Health. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates."

The amendment was seconded and discussion ensued. A motion was made and seconded to add to the amendment proposed by the Board the statement: "who are licensed within the state of Kentucky," after the word "osteopathy." Doctor Hess explained that the Board did not add this to its amendment, since the problem of licensing of doctors in Kentucky will be resolved before the House of Delegates meets next year. The addition to the amendment presented by the Board was defeated. A vote was taken on the original motion as amended by the Board, and the motion carried.

Resolution P

Floyd County Medical Society

WHEREAS, there is no uniform criteria for the admission of members to the county medical societies, be it further

RESOLVED, that the KMA should adopt a common criteria for the admission of members to the county medical society.

Recommendations, Reference Committee No. 6

The Committee considered Resolution P—Admission of Members to the KMA, introduced by Floyd County, concerning the adoption of uniform criteria to be used by all county medical societies for the admission of members.

Reference Committee No. 6 moves that Resolution P not be adopted.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 6 as a whole as amended.

(Motion was seconded and carried.)

Mr. Speaker, the Chairman of Reference Committee No. 6 is deeply grateful to the members of his Committee and to our staff secretarial help for a very

lengthy and burdensome job in going over these reports.

REFERENCE COMMITTEE NO. 6

W. Vinson Pierce, M.D., Covington, Chairman
Glenn W. Bryant, M.D., Louisville
Jerry D. Fraim, M.D., Paintsville
William N. Richardson, M.D., Cadiz
J. Sankey Williams, M.D., Nicholasville

Unfinished Business

Doctor Greathouse recognized Robert N. McLeod, Jr., M.D., Vice-Chairman of the Board of Trustees, for the final report of the Board which read as follows:

The KMA Bylaws provide that the Judicial Council be composed of five members. Four of these members are to be elected by the House of Delegates with terms staggered, so that one member will be elected each year. The KMA Secretary, who is elected by the House, automatically serves as a member of the Council.

According to the Bylaws, Chapter VII, Section 1, "to be eligible for membership on the Jucidial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, Trustee, or as Delegate to the AMA, or (2) Have served five years as a member of the House of Delegates."

The Bylaws provide that the Board of Trustees shall nominate at least one candidate for each vacancy and that additional nominations may be made from the floor.

The term of Clyde C. Sparks, M.D., Ashland, expires with this meeting. The Board of Trustees has unanimously voted to nominate Doctor Sparks to succeed himself for a four-year term.

Doctor McLeod moved the adoption of this report. (Motion was seconded and carried.)

Election of Officers

Speaker Greahouse called on John M. Baird, M.D., Danville, Chairman of the Nominating Committee, for his report. Doctor Baird read the following list of niminations for the positions noted:

President-Elect (Eastern)	Lee C. Hess, M.D. Florence
Vice-President (Central)	Carroll H. Robie, M.D. Louisville
Speaker	Richard F. Greathouse, M.D. Louisville
Vice-Speaker	Carl Cooper, Jr., M.D. Bedford
AMA Delegate	John C. Quertermous, M.D. Murray
AMA Alternate Delegate	Fred C. Rainey, M.D. Elizabethtown
AMA Delegate	David B. Stevens, M.D. Lexington
AMA Alternate Delegate	W. Donald Janney, M.D. Covington

After the presentation of each nomination, the Speaker called for nominations from the floor. The name of Charles C. Rutledge, M.D., Hazard, was nominated from the floor for AMA Delegate in opposition to David B. Stevens, M.D. A vote by ballot was taken, and Doctor Stevens was elected. As no additional nominations were received for any other office, it was moved and seconded that the nominees be elected. Motion was carried.

Doctor Hess, the President-Elect, was escorted to the podium and received a standing ovation.

Doctor Baird submitted the following nominations for the office of Trustee and Alternate Trustee on behalf of the various district Nominating Committees:

First District	W. Eugene Sloan, M.D. Paducah
Alternate	Keith E. Ellis, M.D. Benton
Third District	Ralph L. Cash., M.D. Princeton
Alternate	Edwin R. Davis, M.D. Hopkinsville
Fourth District	W. Bruce Hamilton, M.D. Shepherdsville
Alternate	Emmett W. Wood, M.D. Bardstown
Twelfth District	Robert N. McLeod, Jr., M.D. Somerset
Alternate	Paul J. Sides, M.D. Lancaster
Fourteenth District	Ballard W. Cassady, M.D. Pikeville
Alternate	Jerry D. Fraim, M.D. Paintsville
Eighth District	Carl J. Brueggemann, M.D. Covington
Alternate	Robert C. Smith, M.D. Newport

Doctor Baird explained that nominations for a Trustee and Alternate for the Eighth District

were proposed due to the fact that Doctor Hess, who now serves as Eighth District Trustee, has been elected President-Elect. Doctor Brueggemann, presently serving as Alternate for the Eighth District, was proposed as Trustee and, therefore, necessitates that a new Alternate Trustee be elected.

It was noted that the new Eighth District Trustee will be eligible to serve two full terms after finishing out Doctor Hess's term which expires in one year.

The same procedure employed in the election of the general officers was followed in the election of the Trustees and Alternates. There being no additional nominations from the floor, the above-named nominees were elected.

Nominations For Kentucky Physicians Mutual, Inc., Board of Directors

The following list of nominees for the Board of Directors, Kentucky Physicians Mutual, Inc., was submitted and received for information only:

Charles J. Bisig, M.D., Louisville
Peter P. Bosomworth, M.D., Lexington
William H. Cartmell, M.D., Maysville
Delmas M. Clardy, M.D., Hopkinsville
Guy C. Cunningham, M.D., Ashland
David A. Hull, M.D., Lexington
Hubert C. Jones, M.D., Berea
Charles N. Kavanaugh, Jr., M.D., Lexington
Ralph D. Lynn, M.D., Elkton
Roy Moore, Jr., M.D., Louisville
John C. Quertermous, M.D., Murray
Fred C. Rainey, M.D., Elizabethtown
Keith P. Smith, M.D., Corbin
John T. Walsh, M.D., LaGrange

Election of 1972 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1972 Annual Meeting:

Coy E. Ball, M.D., Owensboro
Harold L. Bushey, M.D., Barbourville
Thomas L. Heavern, Jr., M.D., Highland Heights
Robert L. McClendon, M.D., Louisville
Nelson B. Rue, M.D., Bowling Green

Doctor Rutledge withdrew his name, which was placed in nomination for AMA Delegate in opposition to Doctor Stevens, making the election unanimous.

Doctor Scheen announced that the Board of Trustees would hold its reorganizational meeting on Thursday, at noon, in the Junior Ballroom of the Seelbach Hotel and urged the newly elected Board members to attend.

Speaker Greathouse adjourned the second session of the 1971 KMA House of Delegates at 10:45 p.m. and thanked the members for their participation.



1971 CONSTITUTION AND BYLAWS
OF THE
KENTUCKY MEDICAL ASSOCIATION

Revised September 22, 1971

CONSTITUTION

Article I. Name of the Association
Article II. Purpose of the Association
Article III. Component Societies
Article IV. Composition and Meetings of the Association
Article V. Officers
Article VI. House of Delegates
Article VII. Districts, Sections and District Societies
Article VIII. Board of Trustees
Article IX. Funds and Expenses
Article X. Referendum
Article XI. The Seal
Article XII. Amendments
Article XIII. Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-elect, a Vice President, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be ex officio members of the House of Delegates and entitled to vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline—The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Emeritus, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members. Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have compiled with all pertinent regulations of the State Board of Health. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other governmental service while on duty in the State.

(2) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive the Journal and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive the Journal and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote nor hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from September 1 to August 31 of each year.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

Section 5. Every new member shall be required to attend and successfully complete an orientation course to be presented at stated intervals by the Board of Trustees or one of its committees. The form and content of this course shall be prescribed by the Board; and unless excused by the Board for good cause shown, failure to attend and successfully complete the course within three years after the member is first admitted to active membership shall automatically revoke the delinquent's membership and terminate all of his rights and privileges as a member; and he shall thereafter, for a period of one year, be ineligible for membership in any component society and shall not after one year be admitted to membership unless and until he has successfully completed the required orientation course.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of delegates representing fifty or more component societies. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. Except as provided in Chapter VI, Section 4, it shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. The Vice President shall be elected from the same general area in which the president resides. Delegates to the AMA and their alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice Speaker, the Secretary, and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least five years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the committee. The committee shall select one of its members as chairman at an organization meeting held during the Interim Meeting, or at some other appropriate place designated by the Board of Trustees at least four months before the Annual Meeting. The committee, in addition to such other meetings as it may choose to hold, shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. Before noon of the following day, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nominations for each office to be filled, and shall formally present said nominations to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of the Association shall be ineligible for any office for two years.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary shall advise the Executive Director in all secretarial matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws.

Section 8. The Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Director and shall be countersigned by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the President or the Chairman of the Board of Trustees is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a counter-signature. All five officials shall be required to give bond in an amount to be determined by the Board of Trustees. The Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice President, the President-Elect, the Secretary, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Treasurer upon a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability

is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Director whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Director shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or as Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary, shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Health for this purpose.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cases for disciplinary action exist. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative

of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable the Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recomendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members $130, except that the dues for new members entering practice for the first time shall be $80 per year for the first three full years of practice; (2) Emeritus Members, no dues; (3) Associate Members, $10; (4) Inactive Members, $10; (5) Student Members, $1; (6) Service Members, no dues; (7) Special Members, no dues. Dues fixed by these Bylaws shall constitute assessments against the component societies. The Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January each year.

Section 2. Any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 12 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of

the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

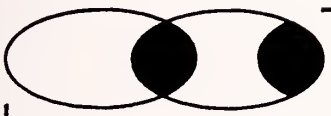
Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary of the Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII. AMENDMENTS

These Bylaws may be amended at any session of the House of Delegates by a two-thirds vote of all the delegates present at that session, after the amendment has laid on the table for one day, provided, however, that an amendment may be proposed in the report of a reference committee and considered by the House without having laid on the table for one day.



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1. Demeulenaere, L.: Action du R 1132 sur le transit gastro-intestinal, Acta gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.

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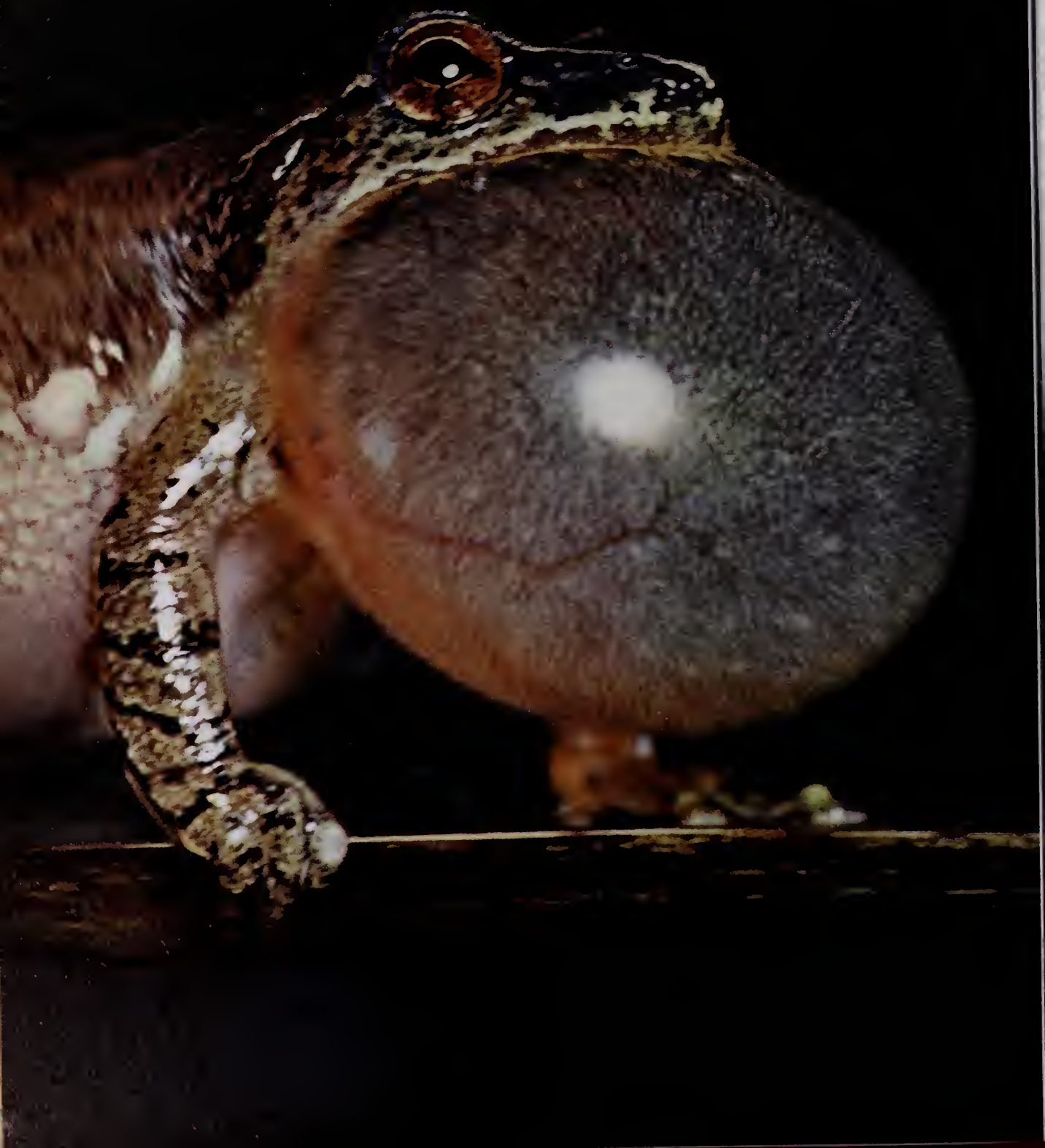
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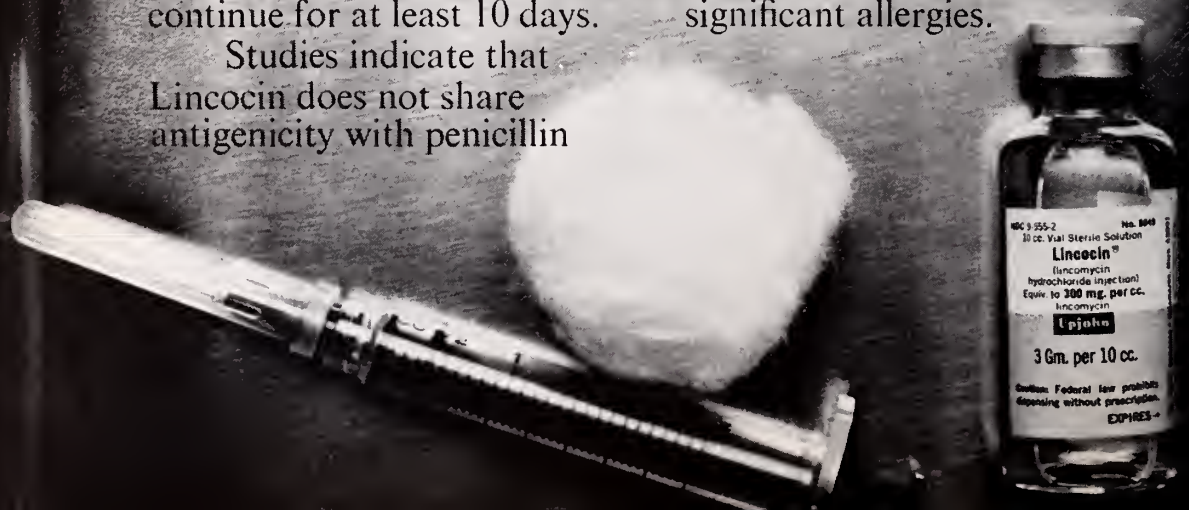
Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

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Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
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500 mg. Capsule	500 mg.
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*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

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WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

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spares the potassium

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Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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Under the Supervision of the Board of Trustees

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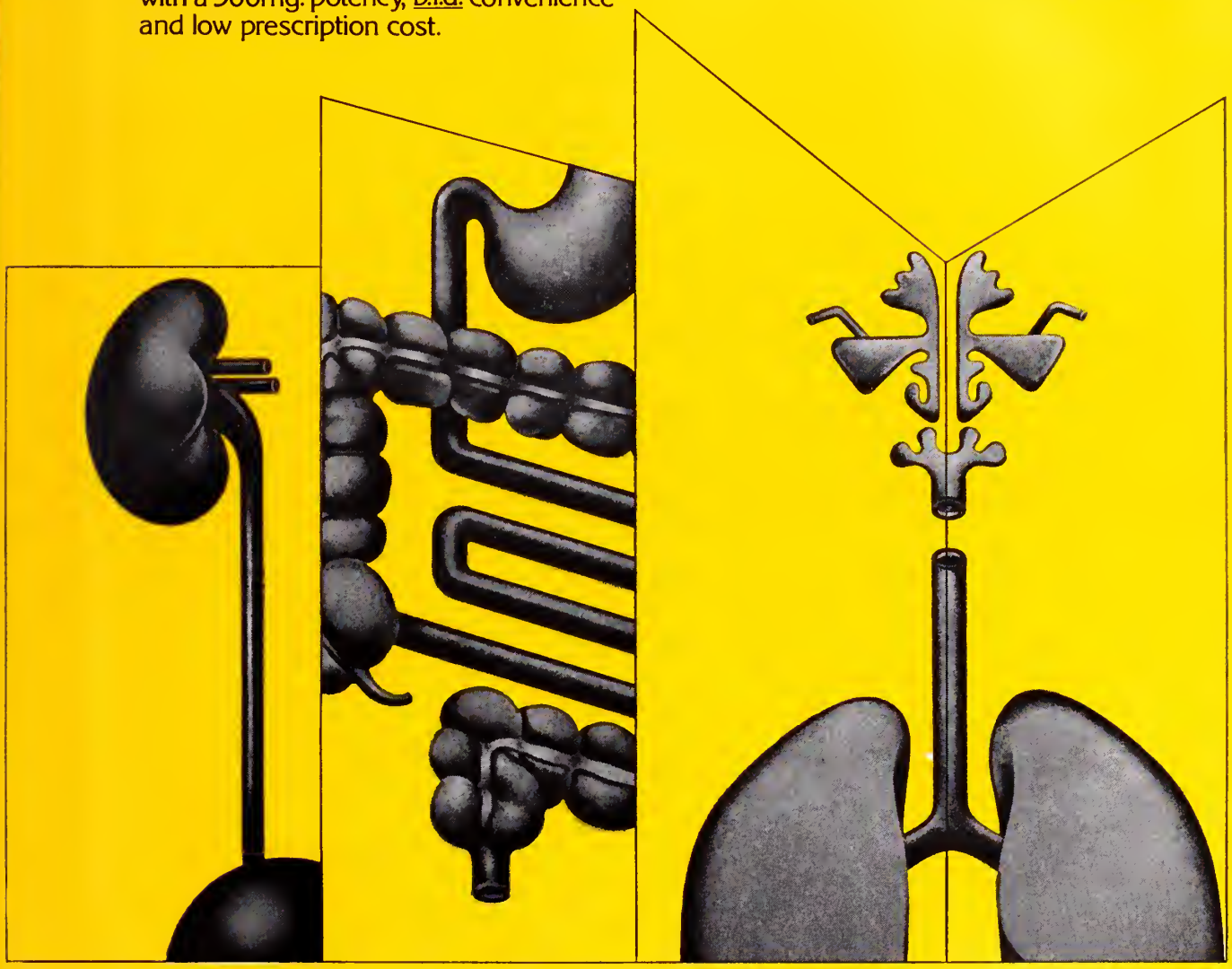
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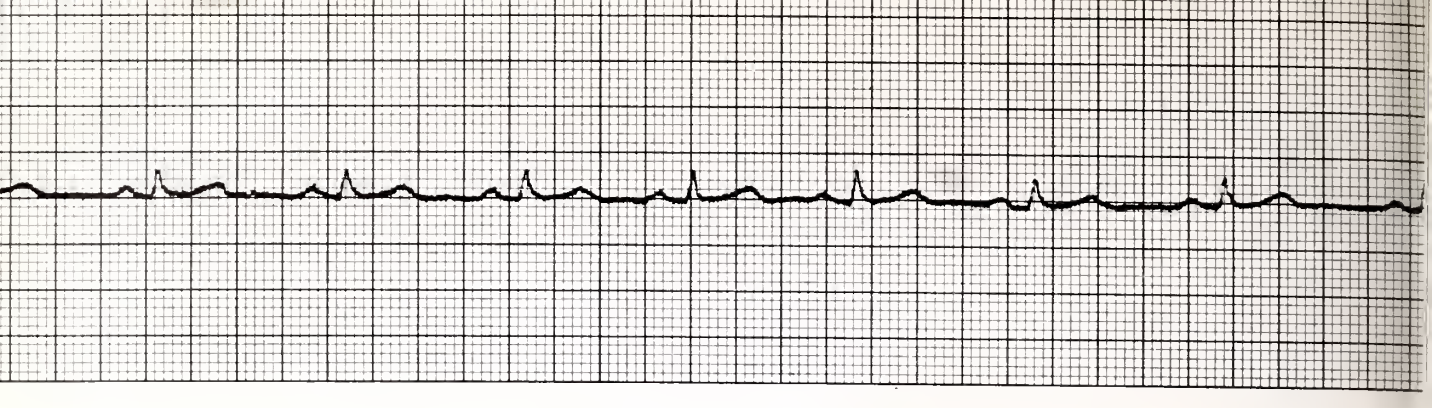
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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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